Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions

A. Emission Unit #(s): F0.001, location North 4,374.863 km, East 275.368 km, UTM (Zone 11)

System 01 – Municipal Solid Waste Landfill		
F	0.001	Municipal Solid Waste Landfill [landfill permitted area is 555 acres, existing landfill waste footprint is 243 acres, maximum design capacity is 42.5 million megagrams (Mg)].

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

Air Pollution Equipment

a. Facility's calculated total NMOC (nonmethane organic compounds) emission rate is **223.60 Mg/yr**, which is greater than **50 Mg/yr** threshold. Pursuant to 40 CFR Part 60 Subpart WWW § 60.752(b)(2)(i); the permittee shall submit a landfill gas collection and control system design plan to the Director and a copy to the Regional EPA Administrator within one (1) year [the design plan was submitted by the permittee on July 5, 2007].

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

Emission Limits

On and after the date of startup of **F0.001**, Permittee will not discharge or cause the discharge into the atmosphere from **F0.001**, the following pollutants in excess of the following specified limits:

a. NAC 445B.22017 *(Federally Enforceable SIP Requirement)* - The opacity from **F0.001** will not equal or exceed 20% in accordance with NAC 445B.22017.

b. Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60 Subpart WWW)

(1) Standards for air emissions from municipal solid waste landfills **[§ 60.752**]:

(i) **§ 60.752(b)(2)(i)** - Permittee's Tier 2 field test conducted in July 2006 indicated exceedance of NMOC emission rate 50 megagrams per year threshold. Permittee has already met the NSPS requirements and submitted a landfill gas collection and control system design plan to the Director and a copy to the Regional EPA Administrator on July 5, 2007.

(a) The collection and control system as described in the plan shall meet the design requirements of paragraph **A.2.b.(1)(ii)** of this Section.

(b) The collection and control system design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of **A.2.b.(2) and A.4.d.(1) through A.4.d.(5)** of this Section proposed by the permittee.

(c) The collection and control system design plan shall either conform with specifications for active collection systems in **A.4.d.(6)** of this Section or include a demonstration to the Director's satisfaction of the sufficiency of the alternative provisions to **A.4.d.(6)** of this Section.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

A. Emission Unit #(s): F0.001 (continued)

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Emission Limits (continued)
b. Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60 Subpart WWW) **(continued)**
(1) Standards for air emissions from municipal solid waste landfills **[§ 60.752**]: **(continued)**
(ii) **§ 60.752(b)(2)(ii)** - The permittee shall install a collection and control system that captures the gas generated within the landfill as required by paragraphs **(ii)(a) or (ii)(b) and A.2.b.(1)(iii)** specified below within 30 months after the first annual report in which the emission rate equals or exceeds 50 megagrams per year.
(a) An active collection system shall [**§ 60.752(b)(2)(ii)(A)**]:
(1) Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;
(2) Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of:
(i) 5 years or more if active; or
(ii) 2 years or more if closed or at final grade.
(3) Collect gas at a sufficient extraction rate;
(4) Be designed to minimize off-site migration of subsurface gas.
(b) A passive collection system shall [**§ 60.752(b)(2)(ii)(B)**]:
(1) Comply with the provisions specified in paragraphs **A.2.b.(1)(ii)(a)(1), (2), and (4)** specified above.
(2) Be installed with liners on the bottom and all sides in all areas in which gas is to be collected. The liners shall be installed as required under **§258.40** (**CFR RCRA Subtitle D**).

(iii) **§ 60.752(b)(2)(iii)** - Route all the collected gas to a control system that complies with the requirements in either paragraph **(a), (b) or (c)** as specified below.
(a) An open flare designed and operated in accordance with **40 CFR Part 60 §60.18** (**General Control Device Requirements**) except as noted in **A.4.d.(1)(iv)** of this Section;
(b) A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in **A.4.d.(1)(iii)** of this Section.
(1) If a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone.
(2) The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified **in A.4.d.(3)** of this Section;
(c) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of paragraph **(a) or (b)** specified above.

(iv) **§ 60.752(b)(2)(iv)** - Operate the collection and control device installed to comply with 40 CFR Part 60 Subpart WWW in accordance with the provisions of **A.2.b.(2), A.4.d.(2) and A.4.d.(3)** of this Section.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

A. Emission Unit #(s): F0.001 (continued)

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Emission Limits (continued)

b. Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60 Subpart WWW) **(continued)**

(1) Standards for air emissions from municipal solid waste landfills [**§ 60.752**]: **(continued)**

(v) **§ 60.752(b)(2)(v)** - The collection and control system may be capped or removed provided that all the conditions of paragraphs **(a), (b), and (c)** specified below are met:

(a) The landfill shall be a closed landfill as defined in 40 CFR Part 60 Subpart WWW §60.751. A closure report shall be submitted to the Director and a copy to the Regional EPA Administrator as provided in **A.4.d.(4)(iv)** of this Section;

(b) The collection and control system shall have been in operation a minimum of 15 years; and

(c) Following the procedures specified in **A.4.d.(1)(i)** of this Section, the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.

(2) Operational standards for collection and control systems [**§ 60.753**]:
The permittee of an municipal solid waste (MSW) landfill with a gas collection and control system complying with the provisions of **A.2.b.(1)(ii)** of this Section shall:

(i) **§ 60.753(a)** - Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:

(a) 5 years or more if active; or

(b) 2 years or more if closed or at final grade;

(ii) **§ 60.753(b)** - Operate the collection system with negative pressure at each wellhead except under the following conditions:

(a) A fire or increased well temperature. The permittee shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in **A.4.d.(4)(vi)(a)** of this Section;

(b) Use of a geomembrane or synthetic cover. The permittee shall develop acceptable pressure limits in the design plan;

(c) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Director;

(iii) **§ 60.753(c)** - Operate each interior wellhead in the collection system with a landfill gas temperature less than 55 °C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

(a) The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by **A.2.b.(1)(i)** of this Section.

(b) Unless an alternative test method is established as allowed by **A.2.b.(1)(i)** of this Section, the oxygen shall be determined by an oxygen meter using Method 3A or 3C except that:

(1) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;

(2) A data recorder is not required;

(3) Only two calibration gases are required, a zero and span, and ambient air may be used as the span;

(4) A calibration error check is not required;

(5) The allowable sample bias, zero drift, and calibration drift are ±10 percent.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

A. Emission Unit #(s): F0.001 (continued)

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Emission Limits (continued)
b. Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60 Subpart WWW) **(continued)**
(2) Operational standards for collection and control systems [**§ 60.753**]: **(continued)**

(iv) **§ 60.753(d)** - Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the permittee shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The permittee may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

(v) **§ 60.753(e)** - Operate the system such that all collected gases are vented to a control system designed and operated in compliance with **A.2.b.(1)(iii)** of this Section. In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour; and

(vi) **§ 60.753(f)** - Operate the control or treatment system at all times when the collected gas is routed to the system.

(vii) **§ 60.753(g)** – If monitoring demonstrates that the operational requirements in paragraphs **2.b.(2)(ii), (iii), or (iv)** specified above are not met, corrective action shall be taken as specified in **A.4.d.(2)(i)(c) through (e) or A.4.d.(2)(iii)** of this Section. If corrective actions are taken as specified in **A.4.d.(2)** of this Section, the monitored exceedance is not a violation of the operational requirements in this section.

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Section VI. Specific Operating Conditions (continued)

A. Emission Unit #(s): F0.001 (continued)

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

Emission Limits (continued)

c. National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (40 CFR Part 63 Subpart AAAA)

(1) Standards [**§ 63.1955**]:

(i) **§ 63.1955(a)** - The permittee must fulfill one of the requirements in paragraph **(a) or (b)** specified below, whichever is applicable:

(a) Comply with the requirements of 40 CFR Part 60, Subpart WWW.

(b) Comply with the requirements of the Federal plan or EPA approved and effective State plan or tribal plan that implements 40 CFR Part 60, Subpart Cc.

(ii) **§ 63.1955(b)** – If the permittee is required by 40 CFR 60.752(b)(2) of Subpart WWW, to install a collection and control system, the permittee must comply with the requirements in **A.4.e.(1) through A.4.e.(4)** of this Section and § 63.1985 of Subpart AAAA 40 CFR Part 63 and with the general provisions of 40 CFR Part 63 as specified in **Table 1** of Subpart AAAA.

(iii) **§ 63.1955(c)** – For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, the permittee must follow the procedures in **A.2.b.(1)** of this Section. If alternatives have already been approved under 40 CFR Part 60 Subpart WWW, these alternatives can be used to comply with 40 CFR Part 63 Subpart AAAA, except that all affected sources must comply with the SSM requirements in Subpart A of part 63 as specified in Table 1 of Subpart AAAA and all affected sources must submit compliance reports every 6 months as specified in **A.4.e.(4)(i) and (ii)** of this Section, including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average.

3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

Operating Parameters

a. Maximum allowable landfill design capacity for **F0.001** will not exceed **42.5** million Mg (megagrams).

b. Permittee's landfill may only receive municipal solid wastes, RCRA Subtitle D wastes and other wastes as defined in 40 CFR Part 60, Subpart WWW (**§ 60.751**). Permittee's landfill may also receive other wastes (e.g., asbestos, treated petroleum-contaminated soils, etc.) as approved by the local authority and NDEP's Bureau of Waste Management. Permittee's facility is a **No Codisposal** facility and will not accept any hazardous wastes.

c. Hours

(1) **F0.001** may operate **8,760** hours per calendar year.

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Section VI. Specific Operating Conditions (continued)

A. Emission Unit #(s): F0.001 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Testing, Recordkeeping and Compliance
The permittee, upon the issuance date of this permit and while in operation of **System 01** will:

a. Monitor and record the waste acceptance rate of **solid wastes** for **F0.001** on a monthly basis.
b. Monitor and record the waste acceptance rate of **solid wastes** for **F0.001** on a yearly basis.
c. The required monitoring established in A.4.a. through A.4.b. above, will be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:
   (1) The calendar date of any required monitoring.
   (2) The total monthly waste acceptance rate of **solid wastes** in Mg, for the corresponding month. The monthly waste acceptance rate will be determined at the end of each calendar month.
   (3) The total yearly waste acceptance rate of **solid wastes** in Mg, for the corresponding year. The yearly waste acceptance rate will be determined as the sum of the monthly waste acceptance rate totals for the **12** immediately preceding calendar months.

d. Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60 Subpart WWW)
   (1) Test Methods and Procedures [**§ 60.754**]:
      (i) **§ 60.754(b)** - After the installation of a collection and control system in compliance with **A.4.d.(2)** of this Section, the permittee shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in **A.2.b.(1)(v)** of this Section, using the following equation:

$$M_{NMOC} = 1.89 \times 10^{-3} Q_{LFG} C_{NMOC}$$

where,
M_{NMOC} = mass emission rate of NMOC, megagrams per year
Q_{LFG} = flow rate of landfill gas, cubic meters per minute
C_{NMOC} = NMOC concentration, parts per million by volume as hexane

(a) The flow rate of landfill gas, Q_{LFG}, shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of appendix A of 40 CFR Part 60.
(b) The average NMOC concentration, C_{NMOC}, shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of appendix A of 40 CFR Part 60. If using Method 18 of appendix A of this part, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP–42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill owner or operator shall divide the NMOC concentration from Method 25C of appendix A of 40 CFR Part 60 by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.
(c) The permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Director.

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Section VI. Specific Operating Conditions (continued)

A. Emission Unit #(s): F0.001 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Testing, Recordkeeping and Compliance (continued)
d. Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60 Subpart WWW) **(continued)**
(1) Test Methods and Procedures [**§ 60.754**] **(continued)**:

(ii) **§ 60.754(c)** - When calculating emissions for PSD purposes, the permittee of each MSW landfill subject to the provisions of Subpart WWW shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in §§51.166 or 52.21 of 40 CFR using AP–42 or other approved measurement procedures.

(iii) **§ 60.754(d)** - For the performance test required in **A.2.b.(1)(iii)(b)** of this Section, Method 25, 25C, or Method 18 of Appendix A of 40 CFR Part 60 must be used to determine compliance with the 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the Director as provided by **A.2.b.(1)(i)(b)** of this Section. Method 3 or 3A shall be used to determine oxygen for correcting the NMOC concentration as hexane to 3 percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8 ppm NMOC as hexane), Method 25A should be used in place of Method 25. If using Method 18 of appendix A of 40 CFR Part 60, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP–42). The following equation shall be used to calculate efficiency:

Control Efficiency = $(NMOC_{in} - NMOC_{out}) / (NMOC_{in})$
where,
$NMOC_{in}$ = mass of NMOC entering control device
$NMOC_{out}$ = mass of NMOC exiting control device

(iv) **§ 60.754(e)** - For the performance test required in **A.2.b.(1)(iii)(a)** of this Section, the net heating value of the combusted landfill gas as determined in §60.18(f)(3) is calculated from the concentration of methane in the landfill gas as measured by Method 3C. A minimum of three 30-minute Method 3C samples are determined. The measurement of other organic components, hydrogen, and carbon monoxide is not applicable. Method 3C may be used to determine the landfill gas molecular weight for calculating the flare gas exit velocity under §60.18(f)(4).

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Section VI. Specific Operating Conditions (continued)

A. Emission Unit #(s): F0.001 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Testing, Recordkeeping and Compliance (continued)

d. Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60 Subpart WWW) **(continued)**

(2) Compliance Provisions **[§ 60.755]**:

(i) **§ 60.755(a)** - Except as provided in **A.2.b.(1)(i)(b)** of this Section, the specified methods in paragraphs **(a) through (f)** as specified below shall be used to determine whether the gas collection system is in compliance with **A.2.b.(1)(ii)** of this Section.

(a) For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with **A.2.b.(1)(ii)(a)(1)** of this Section, the following equation shall be used. The k and L_0 kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP–42) or other site specific values demonstrated to be appropriate and approved by the Director. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

(1) For sites with known year-to-year solid waste acceptance rate:

$$Q_M = \sum_{i=1}^{n} 2\,k\,L_o\,M_i\left(e^{-kt_i}\right)$$

where,
Q_M = maximum expected gas generation flow rate, cubic meters per year
k = methane generation rate constant, year−1
L_o = methane generation potential, cubic meters per megagram solid waste
M_i = mass of solid waste in the i^{th} section, megagrams
t_i = age of the i^{th} section, years

(2) If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equation in paragraph **(a)(1)** as specified above. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equation in paragraph **(a)(1)** as specified above or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.

(b) For the purposes of determining sufficient density of gas collectors for compliance with **A.2.b.(1)(ii)(a)(2)** of this Section, the permittee shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Director, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

(c) For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with **A.2.b.(1)(ii)(a)(3)** of this Section, the permittee shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under **A.2.b.(2)(ii)** of this Section. If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Director for approval.

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Section VI. Specific Operating Conditions (continued)

A. Emission Unit #(s): F0.001 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Testing, Recordkeeping and Compliance (continued)
d. Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60 Subpart WWW) **(continued)**
(2) Compliance Provisions [**§ 60.755**]: **(continued)**
(i) **§ 60.755(a) (continued)**
(d) The permittee is not required to expand the system as required in paragraph **A.4.d.(2)(i)(c)** above during the first 180 days after gas collection system startup.
(e) For the purpose of identifying whether excess air infiltration into the landfill is occurring, the permittee shall monitor each well monthly for temperature and nitrogen or oxygen as provided in **A.2.b.(2)(iii)** of this Section. If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Director for approval.
(f) The permittee seeking to demonstrate compliance with **A.2.b.(1)(ii)(a)(4)** of this Section through the use of a collection system not conforming to the specifications provided in **A.4.d.(6)** of this Section shall provide information satisfactory to the Director as specified in **A.2.b.(1)(i)(c)** of this Section demonstrating that off-site migration is being controlled.

(ii) **§ 60.755(b)** - For purposes of compliance with **A.2.b.(2)(i)** of this Section, the permittee of a controlled landfill shall place each well or design component as specified in the approved design plan as provided in **A.2.b.(1)(i)** of this Section. Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of:
(a) 5 years or more if active; or
(b) 2 years or more if closed or at final grade.

(iii) **§ 60.755(c)** - The following procedures shall be used for compliance with the surface methane operational standard as provided in **A.2.b.(2)(iv)** of this Section.
(a) After installation of the collection system, the permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in paragraph **A.4.d.(2)(iv)** of this Section.
(b) The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.
(c) Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of appendix A of Part 60, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.
(d) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in paragraphs **A.4.d.(2)(iii)(d)(1) through (5)** as specified below shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of **A.2.b.(2)(iv)** of this Section.
(1) The location of each monitored exceedance shall be marked and the location recorded.
(2) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

A. Emission Unit #(s): F0.001 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Testing, Recordkeeping and Compliance (continued)

d. Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60 Subpart WWW) **(continued)**

(2) Compliance Provisions [**§ 60.755**]: **(continued)**

(iii) **§ 60.755(c) (continued)**

(3) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in paragraph **A.4.d.(2)(iii)(d)(5)** of this Section shall be taken, and no further monitoring of that location is required until the action specified in paragraph **A.4.d.(2)(iii)(d)(5)** of this Section has been taken.

(4) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in paragraph **A.4.d.(2)(iii)(d)(2) or (3)** of this Section shall be re-monitored 1 month from the initial exceedance. If the 1-month remonitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month remonitoring shows an exceedance, the actions specified in paragraph **A.4.d.(2)(iii)(d)(3) or (5)** of this Section shall be taken.

(5) For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Director for approval.

(e) The permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

(iv) **§ 60.755(d)** - The permittee seeking to comply with the provisions in paragraph **A.4.d.(2)(iii)** of this Section shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

(a) The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of appendix A of 40 CFR Part 60, except that "methane" shall replace all references to VOC.

(b) The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.

(c) To meet the performance evaluation requirements in section 3.1.3 of Method 21 of appendix A of 40 CFR Part 60, the instrument evaluation procedures of section 4.4 of Method 21 of appendix A of 40 CFR Part 60 shall be used.

(d) The calibration procedures provided in section 4.2 of Method 21 of appendix A of 40 CFR Part 60 shall be followed immediately before commencing a surface monitoring survey.

(v) **§ 60.755(e)** - The provisions of 40 CFR Part 60 apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

A. Emission Unit #(s): F0.001 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Testing, Recordkeeping and Compliance (continued)
d. Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60 Subpart WWW) **(continued)**
(3) Monitoring of Operations [**§ 60.756**]:
Except as provided in **A.2.c.(1)(i)(b)** of this Section,
(i) **§ 60.756(a)** - The permittee seeking to comply with **A.2.b.(1)(ii)(a)** of this Section for an active gas collection system shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and:
(a) Measure the gauge pressure in the gas collection header on a monthly basis as provided in **A.4.d.(2)(i)(c)** of this Section; and
(b) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in **A.4.d.(2)(i)(e)** of this Section; and
(c) Monitor temperature of the landfill gas on a monthly basis as provided in **A.4.d.(2)(i)(e)** of this Section.

(ii) **§ 60.756(b)** - The permittee seeking to comply with **A.2.b.(1)(iii)** of this Section using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment.
(a) A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ±1 percent of the temperature being measured expressed in degrees Celsius or ±0.5 degrees Celsius, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity equal to or greater than 44 megawatts.
(b) A device that records flow to or bypass of the control device. The permittee shall either:
(1) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
(2) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

(iii) **§ 60.756(c)** - The permittee seeking to comply with **A.2.b.(1)(iii)** of this Section using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:
(a) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.
(b) A device that records flow to or bypass of the flare. The permittee shall either:
(1) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
(2) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

(iv) **§ 60.756(d)** - The permittee seeking to demonstrate compliance with **A.2.b.(1)(iii)** of this Section using a device other than an open flare or an enclosed combustor shall provide information satisfactory to the Director as provided in **A.2.b.(1)(i)(b)** of this Section describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Director may specify additional appropriate monitoring procedures.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

A. Emission Unit #(s): F0.001 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Testing, Recordkeeping and Compliance (continued)

d. Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60 Subpart WWW) **(continued)**

(3) Monitoring of Operations [**§ 60.756**]: **(continued)**

(v) **§ 60.756(e)** - The permittee seeking to install a collection system that does not meet the specifications in **A.4.d.(6)** of this Section or seeking to monitor alternative parameters to those required by **A.2.b.(2)** and **A.4.d.(1) through (3)** of this Section shall provide information satisfactory to the Director as provided in **A.2.b.(1)(i)(b) and (c)** of this Section describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Director may specify additional appropriate monitoring procedures.

(vi) **§ 60.756(f)** - The permittee seeking to demonstrate compliance with **A.4.d.(2)(iii)** of this Section, shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in **A.4.d.(2)(iv)** of this Section. Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

(4) Reporting Requirements [**§ 60.757**]:
Except as provided in **A.2.b.(1)(i)(b)** of this Section,

(i) **§ 60.757(c)** - The permittee subject to the provisions of **A.2.b.(1)(i)** of this Section shall submit a collection and control system design plan to the Director and a copy to the Regional EPA Administrator within 1 year of the first report in which the NMOC emission rate equals or exceeds 50 megagrams per year. Permittee's Tier 2 field test conducted in July 2006 indicated exceedance of NMOC emission rate 50 megagrams per year threshold. The permittee has submitted a landfill gas collection and control system design plan to the Administrator for review and approval on July 5, 2007.

(ii) **§ 60.757(d)** - The permittee of a controlled landfill shall submit a closure report to the Director and a copy to the Regional EPA Administrator within 30 days of waste acceptance cessation. The Director may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Director, no additional wastes may be placed into the landfill without filing a notification of modification as described under §60.7(a)(4).

(iii) **§ 60.757(e)** - The permittee of a controlled landfill shall submit an equipment removal report to the Director and a copy to the Regional EPA Administrator 30 days prior to removal or cessation of operation of the control equipment.

(a) The equipment removal report shall contain all of the following items:

(1) A copy of the closure report submitted in accordance with paragraph **A.4.d.(4)(ii)** specified above;

(2) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and

(3) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.

(b) The Director may request such additional information as may be necessary to verify that all of the conditions for removal in **A.2.b.(1)(v)** of this Section have been met.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

A. Emission Unit #(s): F0.001 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Testing, Recordkeeping and Compliance (continued)
d. Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60 Subpart WWW) **(continued)**
(4) Reporting Requirements [**§ 60.757**]: **(continued)**

(iv) **§ 60.757(f)** - The permittee of a landfill seeking to comply with **A.2.b.(1)** of this Section using an active collection system designed in accordance with **A.2.b.(1)(ii)** of this Section shall submit to the Director as well as a copy to the Regional EPA Administrator annual reports of the recorded information in **(a) through (f)** of this paragraph specified below. The initial annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under §60.8. For enclosed combustion devices and flares, reportable exceedances are defined under **A.4.d.(5)(iii)** of this Section.

(a) Value and length of time for exceedance of applicable parameters monitored under **A.4.d.(3)(i), (ii), (iii), and (iv)** of this Section.
(b) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under **A.4.d.(3)** of this Section.
(c) Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.
(d) All periods when the collection system was not operating in excess of 5 days.
(e) The location of each exceedance of the 500 parts per million methane concentration as provided in **A.2.b.(2)(iv)** of this Section and the concentration recorded at each location for which an exceedance was recorded in the previous month.
(f) The date of installation and the location of each well or collection system expansion added pursuant to paragraphs **A.4.d.(2)(i)(c), (ii), and (iii)(d)** of this Section.

(v) **§ 60.757(g)** - The permittee seeking to comply with **A.2.b.(1)(iii)** of this Section shall include the following information with the initial performance test report required under §60.8:

(a) A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;
(b) The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;
(c) The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;
(d) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area; and
(e) The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and
(f) The provisions for the control of off-site migration.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

A. Emission Unit #(s): F0.001 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Testing, Recordkeeping and Compliance (continued)

d. Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60 Subpart WWW) **(continued)**

(5) Recordkeeping Requirements [**§ 60.758**]:

(i) **§ 60.758(a)** - Except as provided in **A.2.b.(1)(i)(b)** of this Section, the permittee of an MSW landfill subject to the provisions of **A.2.b.(1)** of this Section shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered **A.2.b.(1)** of this Section, the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

(ii) Except as provided in **A.2.b.(1)(i)(b)** of this Section, the permittee of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in paragraphs **(a) through (d)** specified below as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.

(a) Where the permittee subject to the provisions of Subpart WWW seeks to demonstrate compliance with **A.2.b.(1)(ii)** of this Section:

(1) The maximum expected gas generation flow rate as calculated in **A.4.d.(2)(i)(a)** of this Section. The permittee may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Director.

(2) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in **A.4.d.(6)(i)(a)** of this Section.

(b) Where the permittee seeks to demonstrate compliance with **A.2.b.(1)(iii)** of this Section through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts:

(1) The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test.

(2) The percent reduction of NMOC determined as specified in **A.2.b.(1)(iii)(b)** of this Section achieved by the control device.

(c) Where the permittee seeks to demonstrate compliance with **A.2.b.(1)(iii)(b)(1)** of this Section through use of a boiler or process heater of any size: a description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the performance testing.

(d) Where the permittee seeks to demonstrate compliance with **A.2.b.(1)(iii)(a)** of this Section through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in §60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

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Section VI. Specific Operating Conditions (continued)

A. Emission Unit #(s): F0.001 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Testing, Recordkeeping and Compliance (continued)
d. Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60 Subpart WWW) **(continued)**
(5) Recordkeeping Requirements [**§ 60.758**]: **(continued)**
(iii) Except as provided in **A.2.b.(1)(i)(b)** of this Section, the permittee of a controlled landfill shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in **A.4.d.(3)** of this Section as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.
(a) The following constitute exceedances that shall be recorded and reported under **A.4.d.(4)(iv)** of this Section:
(1) For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28 oC below the average combustion temperature during the most recent performance test at which compliance with **A.2.b.(1)(iii)** of this Section was determined.
(2) For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required in paragraph **A.4.d.(5)(ii)(c)** of this Section.
(b) The permittee shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under **A.4.d.(3)** of this Section.
(c) The permittee who uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with **A.2.b.(1)(iii)** of this Section shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other State, local, Tribal, or Federal regulatory requirements.)
(d) The permittee seeking to comply with the provisions **A.2.b.** of this Section by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under **A.4.d.(3)(iii)** of this Section, and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

(iv) Except as provided in **A.2.b.(1)(i)(b)** of this Section, the permittee shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.
(a) The permittee shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified in **A.4.d.(2)(ii)** of this Section.
(b) The permittee shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in **A.4.d.(6)(i)(c)(1)** of this Section as well as any nonproductive areas excluded from collection as provided in **A.4.d.(6)(i)(c)(2)** of this Section.

(v) Except as provided in **A.2.b.(1)(i)(b)** of this Section, the permittee shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in **A.2.b.(2)** of this Section, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

A. Emission Unit #(s): F0.001 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Testing, Recordkeeping and Compliance (continued)
d. Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60 Subpart WWW) **(continued)**
(6) Specifications for Active Collection Systems [**§ 60.759**]:
(i) The permittee seeking to comply with **A.2.b.(1)(i)** of this Section shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the Director as provided in **A.2.b.(1)(i)(c)** of this Section:
(a) The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandibility, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat.
(b) The sufficient density of gas collection devices determined in paragraph **(i)(a)** specified above shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.
(c) The placement of gas collection devices determined in paragraph **(i)(a)** specified above shall control all gas producing areas, except as provided by paragraphs **(1) and (2)** specified below.
(1) Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under **A.4.d.(5)(iv)** of this Section. The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to the Director upon request.
(2) Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the Director upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the following equation:

$$Q_i = 2\ k\ L_0\ M_i\ (e^{-kt_i})\ (C_{NMOC})\ (3.6 \times 10^{-9})$$

where,
Q_i = NMOC emission rate from the i^{th} section, megagrams per year
k = methane generation rate constant, $year^{-1}$
L_0 = methane generation potential, cubic meters per megagram solid waste
M_i = mass of the degradable solid waste in the i^{th} section, megagram
t_i = age of the solid waste in the i^{th} section, years
C_{NMOC} = concentration of nonmethane organic compounds, parts per million by volume
3.6×10^{-9} = conversion factor

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

A. Emission Unit #(s): F0.001 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Testing, Recordkeeping and Compliance (continued)
d. Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60 Subpart WWW) **(continued)**
(6) Specifications for Active Collection Systems [**§ 60.759**]: **(continued)**
(i)(c) **(continued)**

(3) The values for k and C_{NMOC} determined in field testing shall be used if field testing has been performed in determining the NMOC emission rate or the radii of influence (this distance from the well center to a point in the landfill where the pressure gradient applied by the blower or compressor approaches zero). If field testing has not been performed, the default values for k, L_o and C_{NMOC} provided in 40 CFR Part 60 Subpart WWW §60.754(a)(1) or the alternative values from §60.754(a)(5) shall be used. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in paragraph **A.4.d.(6)(i)(c)(1)** of this Section.

(ii) The permittee seeking to comply with **A.2.b.(1)(i)(a)** of this Section shall construct the gas collection devices using the following equipment or procedures:
(a) The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.
(b) Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.
(c) Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.

(iii) The permittee seeking to comply with **A.2.b.(1)(i)(a)** of this Section shall convey the landfill gas to a control system in compliance with **A.2.b.(1)(iii)** of this Section through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:
(a) For existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in paragraph **(b)** specified below shall be used.
(b) For new collection systems, the maximum flow rate shall be in accordance with **A.4.d.(2)(i)(a)** of this Section.

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Section VI. Specific Operating Conditions (continued)

A. Emission Unit #(s): F0.001 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Testing, Recordkeeping and Compliance (continued)

e. National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (40 CFR Part 63 Subpart AAAA)

(1) How is Compliance Determined [**§ 63.1960**]:
Compliance is determined in the same way it is determined for 40 CFR Part 60, subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under **A.4.d.(3)(ii)(a), (iii)(a), and (iv)** of this Section, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, the permittee has failed to meet the control device operating conditions described in 40 CFR Part 63 Subpart AAAA and has deviated from the requirements of 40 CFR Part 63 Subpart AAAA. Finally, the permittee must develop a written SSM (Startup, Shutdown, and Malfunction requirements) plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write or maintain a copy of the SSM plan is a deviation from the requirements of 40 CFR Part 63 Subpart AAAA.

(2) What is a deviation [**§ 63.1965**]
A deviation is defined in 40 CFR Part 63 Subpart AAAA § 63.1990. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items in paragraphs **(i) through (iii)** specified below.
(i) A deviation occurs when the control device operating parameter boundaries described in **A.4.d.(5)(iii)(a)** of this Section are exceeded.
(ii) A deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour.
(iii) A deviation occurs when a SSM plan is not developed or maintained on site

(3) How do I calculate the 3-hour block average used to demonstrate compliance [**§ 63.1975**]
Averages are calculated in the same way as they are calculated in 40 CFR part 60, subpart WWW, except that the data collected during the events listed in paragraphs **(i), (ii), (iii), and (iv)** specified below are not to be included in any average computed under 40 CFR Part 63 Subpart AAAA:
(i) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.
(ii) Startups.
(iii) Shutdowns.
(iv) Malfunctions.

(4) Notifications, Records, and Reports
What records and reports permittee must keep and submit [**§ 63.1980**]
(i) The permittee must keep records and reports as specified in **A.4.d.(5) and (4)** of this Section, with one exception: the permittee must submit the annual report described in **A.4.d.(4)(iv)** of this Section every 6 months.
(ii) The permittee must also keep records and reports as specified in the general provisions of 40 CFR Part 60 and Part 63 as shown in Table 1 of Subpart AAAA. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports.

5. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Shielded Requirements
a. No Shielded Requirements are specified.

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Section VI. Specific Operating Conditions (continued)

B. Emission Unit #(s): PF1.001 – PF1.005; and S2.001,
Location PF1.001 – PF1.005: North 4,374.279 km, East 274.865 km, UTM (Zone 11)
Location S2.001: North 4,374.289 km, East 274.931 km, UTM (Zone 11)

System 02 - Wood Chipping Circuit		
PF	1.001	Material transfer by loader to tub grinder (Wood Chipper)
PF	1.002	Wood Chipper - [60.0 tons/hr rated capacity; manufactured by Diamond "Z"; date manufactured – 1989; model # PWG1463; serial # 9FX453MN147035] or ***Equivalent***
PF	1.003	Wood chipper and transfer to Conveyor (Phase 1 Belt)
PF	1.004	Conveyor (Phase 1 Belt) and transfer to Conveyor (Phase 2 Belt)
PF	1.005	Conveyor (Phase 2 Belt) and transfer to Stockpile for trailer discharge
S	2.001	750 hp Diesel Engine – [maximum allowable heat input is 2.52 MMBtu/hr; manufactured by Caterpillar; date manufactured – 1989; model # 3412; serial # 38515306]

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Air Pollution Equipment
a. Emissions from **PF1.002 and PF1.005** shall be controlled using water spray bars at all times of operation.
b. Emissions from **PF1.001, PF1.003, PF1.004 and S2.001** shall be controlled using best operational practices.

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Emission Limits
a. On and after the date of startup of **PF1.001 – PF1.005**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.001 – PF1.005**, the following pollutants in excess of the following specified limits:
(i) NAC 445B.305 *Part 70 Program* - The discharge of PM_{10} (particulate matter less than 10 microns in diameter) from **PF1.001 – PF1.005** combined, to the atmosphere will not exceed **3.20** pounds per hour, nor more than **4.23** tons per year.
(ii) NAC 445B.305 Part 70 Program - The discharge of PM (particulate matter) from **PF1.001 – PF1.005** combined, to the atmosphere will not exceed **5.66** pounds per hour, nor more than **7.50** tons per year.
(iii) NAC 445B.22017 *(Federally Enforceable SIP Requirement)* - The opacity from **PF1.001 – PF1.005** each, will not equal or exceed 20% in accordance with NAC 445B.22017.
b. On and after the date of startup of **S2.001**, Permittee will not discharge or cause the discharge into the atmosphere from **S2.001,** the following pollutants in excess of the following specified limits:
(i) NAC 445B.305 *Part 70 Program* - The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.144** pound per hour, nor more than **0.094** ton per year.
(ii) NAC 445B.305 *Part 70 Program* - The discharge of PM (particulate matter) to the atmosphere will not exceed **0.176** pound per hour, nor more than **0.114** ton per year.
(iii) NAC 445B.305 *Part 70 Program* - The discharge of NO_x (nitrogen oxides) to the atmosphere will not exceed **8.064** pounds per hour, nor more than **5.242** tons per year.
(iv) NAC 445B.305 *Part 70 Program* - The discharge of CO (carbon monoxide) to the atmosphere will not exceed **2.142** pounds per hour, nor more than 1.4 tons per year.
(v) NAC 445B.305 *Part 70 Program* - The discharge of SO_2 (sulfur dioxide) to the atmosphere will not exceed **1.273** pounds per hour, , nor more than **0.827** ton per year.
(vi) NAC 445B.305 *Part 70 Program* - The discharge of VOCs (volatile organic compounds) to the atmosphere will not exceed **0.227** pound per hour, , nor more than **0.147** ton per year.
(vii) NAC 445B.22017 *(Federally Enforceable SIP Requirement)* - The opacity from **S2.001** discharge will not equal or exceed **20%** in accordance with NAC 445B.22017.

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Section VI. Specific Operating Conditions (continued)

B. Emission Unit #(s): PF1.001 – PF1.005; and S2.001 (continued)

2. NAC 445B.3405 *Part 70 Program (Continued)*
National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories
NESHAP for *Stationary Reciprocating Internal Combustion Engines (RICE)*, 40 CFR Part 63, Subpart ZZZZ
(40 CFR 63.6580, et. seq.) – *Existing* stationary RICE located at an *Area Source* of HAP emissions (40 CFR 63.6590(a)(1)(iii)).

c. Permittee will be required to comply with the following emission limitation for **S2.001** no later than May 3, 2013 (40 CFR 63.6595(a)(1)): The discharge of CO to the atmosphere from the exhaust stack of **S2.001** shall not exceed 23 parts-per-million by volume, dry basis (ppmvd) at 15% O_2, as set forth in Table 2d (non-emergency, non-black start CI stationary RICE) of 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6603(a)).

3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Operating Parameters

a. Maximum allowable throughput for **PF1.001 – PF1.005** will not exceed **60.0** tons of **wood wastes** per any one-hour period.
b. Maximum allowable fuel usage rate for **S2.001** will not exceed **18.0** gallons of **# 2 diesel fuel** per any one-hour period.
c. NESHAP for *Stationary Reciprocating Internal Combustion Engines (RICE)*, 40 CFR Part 63, Subpart ZZZZ: If you (Permittee) own or operate an existing non-emergency, non-black start CI stationary RICE with a site-rating of more than 300 brake HP with a displacement less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for non-road diesel fuel (40 CFR 63.6604). The fuel requirement that applies to **S2.001** is combustion of diesel fuel with a sulfur content not to exceed 15 ppm. The minimum cetane index of the diesel fuel combusted in **S2.001** shall be 40, or a maximum aromatic content of 35 volume percent.
d. **Hours**
   (i) **PF1.001 – PF1.005,** each may operate a maximum of **10** hours per day.
   (ii) **PF1.001 – PF1.005,** each may operate a total of **2,650** hours per calendar year.
   (iii) **S2.001** may operate a maximum of **10** hours per day.
   (iv) **S2.001** may operate a total of **1,300** hours per calendar year.

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Recordkeeping and Compliance
Permittee, upon the issuance date of this permit will:

a. Monitor and record the throughput rate of **wood wastes** for **PF1.001 – PF1.005** on a daily basis.
b. Monitor and record the hours of operation for **PF1.001 – PF1.005** on a daily and yearly basis.
c. Monitor and record the fuel usage rate of **#2 diesel fuel** for **S2.001** on a daily basis.
d. Monitor and record the hours of operation for **S2.001** on a daily and yearly basis.
e. The required monitoring established in **B.4.a. through B.4.d.** above, will be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:
   (i) The calendar date of any required monitoring.
   (ii) The total daily throughput rate of **wood wastes** in tons, for the corresponding date.
   (iii) The total daily fuel usage rate of **#2 diesel fuel** in gallons, for the corresponding date.
   (iv) The total daily hours of operation for the corresponding date.
   (v) The corresponding average hourly throughput rate for **PF1.001 – PF1.005** each, in tons per hour. The average hourly throughput rate will be determined from the total daily throughput rate and the total daily hours of operation recorded in **B.4.e.(ii) and (iv)** above. The yearly hours of operation for **PF1.001 – PF1.005** will be determined as the sum of the daily hours of operation totals for the 365 immediately preceding calendar days.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

B. Emission Unit #(s): PF1.001 – PF1.005; and S2.001 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Recordkeeping and Compliance

e. (continued)
(vi) The corresponding average hourly fuel usage rate in gallons per hour. The average hourly fuel usage rate will be determined from the total daily fuel usage rate and the total daily hours of operation recorded in **B.4.e.(iii) and (iv)** above. The yearly hours of operation for **S2.001** will be determined as the sum of the daily hours of operation totals for the 365 immediately preceding calendar days.

5. **Equivalent Wood Chipper:** The Permittee may use another equivalent wood chipper as long as the following conditions are met:
a. The Permittee shall comply with all the permit conditions listed in Section **VI.B.1., 2. and 3**.
b. The Permittee shall not operate the emission unit **PF1.002** and the other equivalent wood chipper simultaneously.
c. The Permittee shall document the detail information of the equivalent wood chipper (i.,e., maximum wood waste feed rates, manufacturer of equipments, date equipments manufactured, model and serial numbers, etc.) as well as required "Monitoring, Recordkeeping and Compliance" requirements listed in Section **VI.B.4**.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

B. Emission Unit #(s): PF1.001 – PF1.005; and S2.001 (continued)

6. National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories
NESHAP for *Stationary Reciprocating Internal Combustion Engines (RICE)*, 40 CFR Part 63, Subpart ZZZZ
(40 CFR 63.6580, et. seq.) – *Existing* stationary RICE located at an *Area Source* of HAP emissions (40 CFR 63.6590(a)(1)(iii)).

a. Permittee will be required to comply with the applicable CO emission limitation in VI.B.2.c. of this operating permit no later than May 3, 2013 (40 CFR 63.6595(a)(1)).

b. *General Compliance Requirements* for **S2.001** – 40 CFR Part 63, Subpart ZZZZ
   (1) You (Permittee) must be in compliance with the emission limitations and operating limitations in 40 CFR Part 63, Subpart ZZZZ that apply to you at all times (40 CFR 63.6605(a)).
   (2) At all times you (Permittee) must operate and maintain **S2.001** in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by 40 CFR Part 63, Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source (40 CFR 63.6605(b)).

c. *Testing and Initial Compliance Requirements* for **S2.001** – 40 CFR Part 63, Subpart ZZZZ
   (1) You (Permittee) must conduct an initial performance test on the exhaust stack of **S2.001** to demonstrate initial compliance with the CO emission limitation in VI.B.2.c. of this operating permit within 180 days after the May 3, 2013 compliance date (40 CFR 63.6612(a)).
   (2) Permittee must conduct performance tests using EPA Method 10 of 40 CFR Part 60, Appendix A. The measured concentrations of CO in the exhaust of **S2.001** must be corrected to 15% O_2, dry basis (Table 4 of 40 CFR Part 63, Subpart ZZZZ, 40 CFR 63.6612(a)).
   (3) You (Permittee) must conduct subsequent performance tests on **S2.001** every 8,760 hours of operation or 3 years, whichever comes first (Table 3 of 40 CFR Part 63, Subpart ZZZZ, 40 CFR 63.6615).
   (4) If you (Permittee) own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again (40 CFR 63.6620(b)).
   (5) You (Permittee) must conduct three separate test runs for each performance test. Each test run must last at least 1 hour (40 CFR 63.6620(d)).
   (6) Permittee will record the quantity (in gallons) of the diesel fuel combusted in **S2.001** for each test run and compute the heat input (in MMBtu) during each test run using the conversion factor 140,000 Btu/gallon of diesel fuel (NAC 445B.3405).
   (7) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used the measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, strain gauges, etc. are used, the model number of the measurement device, and an estimate of its accuracy in percentage of the true value must be provided (40 CFR 63.6620(i)).

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

B. Emission Unit #(s): PF1.001 – PF1.005; and S2.001 (continued)

6. National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories
NESHAP for *Stationary Reciprocating Internal Combustion Engines (RICE)*, 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6580, et. seq.) – *Existing* stationary RICE located at an *Area Source* of HAP emissions (40 CFR 63.6590(a)(1)(iii))(continued)

c. *Testing and Initial Compliance Requirements* for **S2.001** – 40 CFR Part 63, Subpart ZZZZ (continued)

(8) If you (Permittee) own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing crankcase filters (40 CFR 63.6625(g)).

(9) The idle time upon startup of **S2.001** shall not exceed 30 minutes. The CO emission limitation in VI.B.2.c. applies at all times other than startup (40 CFR 63.6625(h)).

(10) You (Permittee) must submit the *Notification of Compliance Status* containing the results of the initial compliance demonstration, as required in d.(1) above, according to the requirements in 40 CFR 63.6645 (40 CFR 6630(c)).

d. *Continuous Compliance Requirements* for **S2.001** – 40 CFR Part 63, Subpart ZZZZ

(1) You (Permittee) must demonstrate continuous compliance with the CO emission limitation in VI.B.2.c. of this operating permit according to methods specified in Table 6 of Subpart ZZZZ (40 CFR 63.6640(a)), which specify that the Permittee shall demonstrate continuous compliance by conducting performance tests for CO every 8,760 hours of operation or 3 years, whichever comes first, to demonstrate that your emissions remain at or below the CO concentration limit in VI.B.2.c. of this operating permit.

(2) You (Permittee) must report each instance in which you did not meet the emission limitation as set forth in VI.B.2.c. of this operating permit. These instances are deviations from the emission limitation in Subpart ZZZZ and must be reported according to the requirements in 40 CFR 63.6650 (40 CFR 63.6640(b)).

(3) You (Permittee) must also report each instance in which you did not meet the requirements in Table 8 to Subpart ZZZZ that apply to you (40 CFR 63.6640(e)). Table 8 to Subpart ZZZZ contains those applicable general provisions of 40 CFR Part 63, Subpart A.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

B. Emission Unit #(s): PF1.001 – PF1.005; and S2.001 (continued)

6. National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories
NESHAP for *Stationary Reciprocating Internal Combustion Engines (RICE)*, 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6580, et. seq.) – *Existing* stationary RICE located at an *Area Source* of HAP emissions (40 CFR 63.6590(a)(1)(iii))(continued)

e. *Notifications* for **S2.001** – 40 CFR Part 63, Subpart ZZZZ
(1) You (Permittee) must submit a *Notification of Intent* to conduct a performance test at least 60 days before the performance test is scheduled to begin (40 CFR 63.6645(g)).
(2) You (Permittee) must submit a *Notification of Compliance Status* according to 40 CFR 63.9(h)(2)(ii) for each performance test or other initial compliance demonstration (40 CFR 63.6645(h)). For each initial and subsequent performance test, the *Notification of Compliance Status* must be sent to the Nevada Bureau of Air Pollution Control (NBAPC) before the close of business on the 60th day following the completion of the tests.

f. *Reporting* for **S2.001** – 40 CFR Part 63, Subpart ZZZZ
(1) Compliance reports shall be submitted semi-annually in accordance with the requirements in Section V.C. of this *Part 70* operating permit (40 CFR 63.6650(b)(5)).
(2) The semi-annual compliance report should contain, at a minimum, the following information:
(i) Company name and address (40 CFR 63.6650(c)(1)).
(ii) Statement by the responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report (40 CFR 6650(c)(2)).
(iii) Date of report and beginning and ending dates of the reporting period (40 CFR 63.6650(c)(3)).
(3) If there are no deviations from any emission limitation, a statement that there were no deviations from the emission limitation during the reporting period should be included in the semi-annual compliance report (40 CFR 63.6650(c)(5)).
(4) For each deviation, the compliance report must contain the total operating time of the stationary RICE at which the deviation occurred during the reporting period, and information on the number, duration, and cause of deviations (including unknown cause, if applicable), and the corrective action taken (40 CFR 63.6650(d)).
(5) Deviations shall be reported semi-annually in accordance with the requirements in Section V.C. of this *Part 70* operating permit (40 CFR 6650(f)).

g. *Recordkeeping* for **S2.001** – 40 CFR Part 63, Subpart ZZZZ
(1) Permittee will keep copies of each notification and report submitted to comply with Subpart ZZZZ, and records of the occurrence and duration of each malfunction of **S2.001**. Permittee must also keep records of all performance tests (40 CFR 63.6655(a)).
(2) Permittee must keep records of subsequent performance tests that show continuous compliance with the CO emission limitation in VI.B.2.c. of this operating permit (40 CFR 63.6655(d)).
(3) Records must be in a form suitable and readily available for expeditious review; you (Permittee) must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; you must keep each record readily accessible in hardcopy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record (40 CFR 63.6660).

7. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Shielded Requirements
a. No Shielded Requirements are specified.

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Section VI. Specific Operating Conditions (continued)

C. Emission Unit #(s): PF1.006 – PF1.010; and S2.002,
Location PF1.006 – PF1.010: North 4,375.246 km, East 276.463 km, UTM (Zone 11)
Location S2.002: North 4,375.297 km, East 276.389 km, UTM (Zone 11)

System 03 – Asphalt Grinding Circuit		
PF	1.006	Material transfer by loader to Coleman Power Unit and transfer to conveyor (Phase 1 Belt)
PF	1.007	Conveyor (Phase 1 Belt) and transfer to Asphalt Grinder
PF	1.008	Asphalt Grinder – [110.0 tons/hr rated capacity ; manufactured by Hazemag; date manufactured – April 1999; model # APSE1013Q; serial # FABSM1013K] or ***Equivalent***
PF	1.009	Fines conveyor and transfer fine materials to Stockpile
PF	1.010	Conveyor (Phase 2 Belt) and transfer asphalt materials to Stockpile
S	2.002	519 hp Diesel Engine – [maximum allowable heat input is 1.82 MMBtu/hr; manufactured by Caterpillar; date manufactured – 1999; model # CT3406; serial # 4ZR05076]

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Air Pollution Equipment
a. Emissions from **PF1.006 and PF1.008** shall be controlled using water spray bars at all times of operation.
b. Emissions from **PF1.007, PF1.009, PF1.010 and S2.002** shall be controlled using best operational practices.

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Emission Limits
a. On and after the date of startup of **PF1.006 – PF1.010**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.001 – PF1.005**, the following pollutants in excess of the following specified limits:
(i) NAC 445B.305 *Part 70 Program* - The discharge of PM_{10} (particulate matter less than 10 microns in diameter) from **PF1.006 – PF1.010** combined, to the atmosphere will not exceed **0.53** pound per hour, nor more than **0.56** ton per year.
(ii) NAC 445B.305 Part 70 Program - The discharge of PM (particulate matter) from **PF1.006 – PF1.010** combined, to the atmosphere will not exceed **1.11** pounds per hour, nor more than **1.18** tons per year.
(iii) NAC 445B.22017 *(Federally Enforceable SIP Requirement)* - The opacity from **PF1.006 – PF1.010** each, will not equal or exceed 20% in accordance with NAC 445B.22017.
b. On and after the date of startup of **S2.002**, Permittee will not discharge or cause the discharge into the atmosphere from **S2.002,** the following pollutants in excess of the following specified limits:
(i) NAC 445B.305 *Part 70 Program* - The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.564** pound per hour, nor more than **0.226** ton per year.
(ii) NAC 445B.305 *Part 70 Program* - The discharge of PM (particulate matter) to the atmosphere will not exceed **0.564** pound per hour, , nor more than **0.226** ton per year.
(iii) NAC 445B.305 *Part 70 Program* - The discharge of NO_x (nitrogen oxides) to the atmosphere will not exceed **8.026** pounds per hour, nor more than **3.210** tons per year.
(iv) NAC 445B.305 *Part 70 Program* - The discharge of CO (carbon monoxide) to the atmosphere will not exceed **1.729** pounds per hour, nor more than **0.69** ton per year.
(v) NAC 445B.305 *Part 70 Program* - The discharge of SO_2 (sulfur dioxide) to the atmosphere will not exceed **0.528** pounds per hour, , nor more than **0.211** ton per year.
(vi) NAC 445B.305 *Part 70 Program* - The discharge of VOCs (volatile organic compounds) to the atmosphere will not exceed **0.655** pound per hour, nor more than **0.262** ton per year.
(vii) NAC 445B.22017 *(Federally Enforceable SIP Requirement)* - The opacity from **S2.002** discharge will not equal or exceed **20%** in accordance with NAC 445B.22017.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

C. Emission Unit #(s): PF1.006 – PF1.010; and S2.002 (continued)

2. NAC 445B.3405 *Part 70 Program (Continued)*
National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories
NESHAP for *Stationary Reciprocating Internal Combustion Engines (RICE)*, 40 CFR Part 63, Subpart ZZZZ
(40 CFR 63.6580, et. seq.) – *Existing* stationary RICE located at an *Area Source* of HAP emissions (40 CFR 63.6590(a)(1)(iii)).

c. Permittee will be required to comply with the following emission limitation for **S2.002** no later than May 3, 2013 (40 CFR 63.6595(a)(1)): The discharge of CO to the atmosphere from the exhaust stack of **S2.002** shall not exceed 23 parts-per-million by volume, dry basis (ppmvd) at 15% O_2, as set forth in Table 2d (non-emergency, non-black start CI stationary RICE) of 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6603(a)).

3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Operating Parameters

a. Maximum allowable throughput for **PF1.006 – PF1.010** will not exceed **110.0** tons of **asphalt wastes** per any one-hour period.
b. Maximum allowable fuel usage rate for **S2.002** will not exceed **13.0** gallons of **# 2 diesel fuel** per any one-hour period.
c. NESHAP for *Stationary Reciprocating Internal Combustion Engines (RICE)*, 40 CFR Part 63, Subpart ZZZZ: If you (Permittee) own or operate an existing non-emergency, non-black start CI stationary RICE with a site-rating of more than 300 brake HP with a displacement less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for non-road diesel fuel (40 CFR 63.6604). The fuel requirement that applies to **S2.002** is combustion of diesel fuel with a sulfur content not to exceed 15 ppm. The minimum cetane index of the diesel fuel combusted in **S2.002** shall be 40, or a maximum aromatic content of 35 volume percent.
d. **Hours**
   (i) **PF1.006 – PF1.010** each, may operate a maximum of **8** hours per day.
   (ii) **PF1.006 – PF1.010** each, may operate a total of **2,120** hours per calendar year.
   (iii) **S2.002** may operate a maximum of **8** hours per day.
   (iv) **S2.002** may operate a total of **800** hours per calendar year.

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Recordkeeping and Compliance
Permittee, upon the issuance date of this permit will:

a. Monitor and record the throughput rate of **asphalt wastes** for **PF1.006 – PF1.010** on a daily basis.
b. Monitor and record the hours of operation for **PF1.006 – PF1.010** on a daily and yearly basis.
c. Monitor and record the fuel usage rate of **#2 diesel fuel** for **S2.002** on a daily basis.
d. Monitor and record the hours of operation for **S2.002** on a daily and yearly basis.
e. The required monitoring established in **C.4.a. through C.4.d.** above, will be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:
   (i) The calendar date of any required monitoring.
   (ii) The total daily throughput rate of **asphalt wastes** in tons, for the corresponding date.
   (iii) The total daily fuel usage rate of **#2 diesel fuel** in gallons, for the corresponding date.
   (iv) The total daily hours of operation for the corresponding date.
   (v) The corresponding average hourly throughput rate for **PF1.006 – PF1.010** each, in tons per hour. The average hourly throughput rate will be determined from the total daily throughput rate and the total daily hours of operation recorded in **C.4.e.(ii) and (iv)** above. The yearly hours of operation for **PF1.006 – PF1.010** will be determined as the sum of the daily hours of operation totals for the 365 immediately preceding calendar days.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

C. Emission Unit #(s): PF1.006 – PF1.010; and S2.002 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Recordkeeping and Compliance (continued)
e. (continued)
(vi) The corresponding average hourly fuel usage rate in gallons per hour. The average hourly fuel usage rate will be determined from the total daily fuel usage rate and the total daily hours of operation recorded in **C.4.e.(iii) and (iv)** above. The yearly hours of operation for **S2.002** will be determined as the sum of the daily hours of operation totals for the 365 immediately preceding calendar days.

5. **Equivalent Asphalt Grinder:** The Permittee may use another equivalent asphalt grinder provided the following conditions are met:
a. The Permittee shall comply with all the permit conditions listed in Section **VI.C.1., 2. and 3**.
b. The Permittee shall not operate the emission unit **PF1.008** and another equivalent asphalt grinder simultaneously.
c. The Permittee shall document the detail information of the equivalent asphalt grinder (i.,e., maximum asphalt waste feed rates, manufacturer of equipment, date equipment manufactured, model and serial numbers, etc.) as well as required "Monitoring, Recordkeeping and Compliance" requirements listed in Section **VI.C.4**.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

C. Emission Unit #(s): PF1.006 – PF1.010; and S2.002 (continued)

6. National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories
NESHAP for *Stationary Reciprocating Internal Combustion Engines (RICE)*, 40 CFR Part 63, Subpart ZZZZ
(40 CFR 63.6580, et. seq.) – *Existing* stationary RICE located at an *Area Source* of HAP emissions (40 CFR 63.6590(a)(1)(iii)).

a. Permittee will be required to comply with the applicable CO emission limitation in VI.C.2.c. of this operating permit no later than May 3, 2013 (40 CFR 63.6595(a)(1)).

b. *General Compliance Requirements* for **S2.002** – 40 CFR Part 63, Subpart ZZZZ
   (1) You (Permittee) must be in compliance with the emission limitations and operating limitations in 40 CFR Part 63, Subpart ZZZZ that apply to you at all times (40 CFR 63.6605(a)).
   (2) At all times you (Permittee) must operate and maintain **S2.002** in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by 40 CFR Part 63, Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source (40 CFR 63.6605(b)).

c. *Testing and Initial Compliance Requirements* for **S2.002** – 40 CFR Part 63, Subpart ZZZZ
   (1) You (Permittee) must conduct an initial performance test on the exhaust stack of **S2.002** to demonstrate initial compliance with the CO emission limitation in VI.C.2.c. of this operating permit within 180 days after the May 3, 2013 compliance date (40 CFR 63.6612(a)).
   (2) Permittee must conduct performance tests using EPA Method 10 of 40 CFR Part 60, Appendix A. The measured concentrations of CO in the exhaust of **S2.002** must be corrected to 15% O_2, dry basis (Table 4 of 40 CFR Part 63, Subpart ZZZZ, 40 CFR 63.6612(a)).
   (3) You (Permittee) must conduct subsequent performance tests on **S2.002** every 8,760 hours of operation or 3 years, whichever comes first (Table 3 of 40 CFR Part 63, Subpart ZZZZ, 40 CFR 63.6615).
   (4) If you (Permittee) own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again (40 CFR 63.6620(b)).
   (5) You (Permittee) must conduct three separate test runs for each performance test. Each test run must last at least 1 hour (40 CFR 63.6620(d)).
   (6) Permittee will record the quantity (in gallons) of the diesel fuel combusted in **S2.002** for each test run and compute the heat input (in MMBtu) during each test run using the conversion factor 140,000 Btu/gallon of diesel fuel (NAC 445B.3405).
   (7) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used the measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, strain gauges, etc. are used, the model number of the measurement device, and an estimate of its accuracy in percentage of the true value must be provided (40 CFR 63.6620(i)).

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

C. Emission Unit #(s): PF1.006 – PF1.010; and S2.002 (continued)

6. National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories
NESHAP for *Stationary Reciprocating Internal Combustion Engines (RICE)*, 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6580, et. seq.) – *Existing* stationary RICE located at an *Area Source* of HAP emissions (40 CFR 63.6590(a)(1)(iii))(continued)

c. *Testing and Initial Compliance Requirements* for **S2.002** – 40 CFR Part 63, Subpart ZZZZ (continued)

(8) If you (Permittee) own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing crankcase filters (40 CFR 63.6625(g)).

(9) The idle time upon startup of **S2.002** shall not exceed 30 minutes. The CO emission limitation in VI.C.2.c. applies at all times other than startup (40 CFR 63.6625(h)).

(10) You (Permittee) must submit the *Notification of Compliance Status* containing the results of the initial compliance demonstration, as required in d.(1) above, according to the requirements in 40 CFR 63.6645 (40 CFR 6630(c)).

d. *Continuous Compliance Requirements* for **S2.002** – 40 CFR Part 63, Subpart ZZZZ

(1) You (Permittee) must demonstrate continuous compliance with the CO emission limitation in VI.C.2.c. of this operating permit according to methods specified in Table 6 of Subpart ZZZZ (40 CFR 63.6640(a)), which specify that the Permittee shall demonstrate continuous compliance by conducting performance tests for CO every 8,760 hours of operation or 3 years, whichever comes first, to demonstrate that your emissions remain at or below the CO concentration limit in VI.C.2.c. of this operating permit.

(2) You (Permittee) must report each instance in which you did not meet the emission limitation as set forth in VI.C.2.c. of this operating permit. These instances are deviations from the emission limitation in Subpart ZZZZ and must be reported according to the requirements in 40 CFR 63.6650 (40 CFR 63.6640(b)).

(3) You (Permittee) must also report each instance in which you did not meet the requirements in Table 8 to Subpart ZZZZ that apply to you (40 CFR 63.6640(e)). Table 8 to Subpart ZZZZ contains those applicable general provisions of 40 CFR Part 63, Subpart A.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

C. Emission Unit #(s): PF1.006 – PF1.010; and S2.002 (continued)

6. National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories
NESHAP for *Stationary Reciprocating Internal Combustion Engines (RICE)*, 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6580, et. seq.) – *Existing* stationary RICE located at an *Area Source* of HAP emissions (40 CFR 63.6590(a)(1)(iii))(continued)

e. *Notifications* for **S2.002** – 40 CFR Part 63, Subpart ZZZZ
(1) You (Permittee) must submit a *Notification of Intent* to conduct a performance test at least 60 days before the performance test is scheduled to begin (40 CFR 63.6645(g)).
(2) You (Permittee) must submit a *Notification of Compliance Status* according to 40 CFR 63.9(h)(2)(ii) for each performance test or other initial compliance demonstration (40 CFR 63.6645(h)). For each initial and subsequent performance test, the *Notification of Compliance Status* must be sent to the Nevada Bureau of Air Pollution Control (NBAPC) before the close of business on the 60th day following the completion of the tests.

f. *Reporting* for **S2.002** – 40 CFR Part 63, Subpart ZZZZ
(1) Compliance reports shall be submitted semi-annually in accordance with the requirements in Section V.C. of this *Part 70* operating permit (40 CFR 63.6650(b)(5)).
(2) The semi-annual compliance report should contain, at a minimum, the following information:
(i) Company name and address (40 CFR 63.6650(c)(1)).
(ii) Statement by the responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report (40 CFR 6650(c)(2)).
(iii) Date of report and beginning and ending dates of the reporting period (40 CFR 63.6650(c)(3)).
(3) If there are no deviations from any emission limitation, a statement that there were no deviations from the emission limitation during the reporting period should be included in the semi-annual compliance report (40 CFR 63.6650(c)(5)).
(4) For each deviation, the compliance report must contain the total operating time of the stationary RICE at which the deviation occurred during the reporting period, and information on the number, duration, and cause of deviations (including unknown cause, if applicable), and the corrective action taken (40 CFR 63.6650(d)).
(5) Deviations shall be reported semi-annually in accordance with the requirements in Section V.C. of this *Part 70* operating permit (40 CFR 6650(f)).

g. *Recordkeeping* for **S2.002** – 40 CFR Part 63, Subpart ZZZZ
(1) Permittee will keep copies of each notification and report submitted to comply with Subpart ZZZZ, and records of the occurrence and duration of each malfunction of **S2.002**. Permittee must also keep records of all performance tests (40 CFR 63.6655(a)).
(2) Permittee must keep records of subsequent performance tests that show continuous compliance with the CO emission limitation in VI.C.2.c. of this operating permit (40 CFR 63.6655(d)).
(3) Records must be in a form suitable and readily available for expeditious review; you (Permittee) must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; you must keep each record readily accessible in hardcopy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record (40 CFR 63.6660).

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

C. Emission Unit #(s): PF1.006 – PF1.010; and S2.002 (continued)

7. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

Shielded Requirements

a. No Shielded Requirements are specified.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

D. Emission Unit #(s): PF1.011, Location North 4,374.863 km, East 275.368 km, UTM (Zone 11)

System 04 – Petroleum Contaminated Soil Storage and Disposal		
PF	**1.011**	Bioremediation treatment cell of 70,000 sq-ft in size and a capacity of 11,000 cubic yards. Permittee accepts petroleum contaminated soil for disposal as daily cover. The accepted soils will be stockpiled, treated, disposed of, or used as landfill cover material, depending on the concentration, quantity and type of hydrocarbon present.

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Air Pollution Equipment
a. Emissions from **PF1.011** shall be controlled using best operational practices.

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Emission Limits
a. On and after the date of startup of **PF1.011**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.011**, the following pollutants in excess of the following specified limits:
(i) The discharge of volatile organic compounds (VOCs) to the atmosphere will not exceed 2.0 tons per year.
(ii) NAC 445B.22017 *(Federally Enforceable SIP Requirement)* - The opacity from **PF1.011**discharge will not equal or exceed **20%** in accordance with NAC 445B.22017.

3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Operating Parameters
a. Permittee will accept petroleum contaminated soils to use as landfill cover material under the following conditions:
(i) Only soils contaminated with gasoline, heating oil, and/or diesel fuel will be accepted.
(ii) Permittee accepting soils with total petroleum hydrocarbon (TPH) analytical concentrations greater than or equal to 600 ppmv (parts per million by volume) will be treated at the bioremediation treatment cell.
(iii) Each batch of soil to be disposed of will be assigned a unit value based on the type of petroleum contamination, as follows:
(1) Heating Oil = 1 petroleum unit per ton;
(2) Diesel = 2 petroleum units per ton;
(3) Gasoline = 6 petroleum units per ton;
(4) For batches of soils contaminated with a combination of gasoline and any combination of diesel and heating oil, the entire batch will be assigned the unit value for gasoline of 6 units;
(5) For batches of soils contaminated with a combination of diesel and heating oil, the entire batch will be assigned the unit value for diesel of 2 units.
(6) Petroleum unit value corresponds to a weighted value to gas-, diesel- and heating oil-contaminated soil so they will equal the heavy end hydrocarbon-contaminated soils on a per-unit basis.
(iv) Soil acceptance will not exceed 16,000 units (based on tonnage) per calendar year.
b. **Hours**
(i) **PF1.011** may operate **8,760** hours per calendar year.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

D. Emission Unit #(s): PF1.011 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Recordkeeping and Compliance

a. The permittee, upon the issuance date of this permit will:

(i) Monitor and record the weight, in tons, of each batch of petroleum contaminated soil received at the landfill, and the number of batches received, on a daily and yearly basis. Each batch will be accompanied by analytical results for analysis of total petroleum hydrocarbons (TPH) purgeable (gasoline) and extractable (diesel fuel and heating oil) by EPA Method 8015 and volatile organic compounds by EPA Method 8260B.

(ii) A waste management profile will be completed for each load and signed by a representative of the generator that describes the source of contaminated soil generation, type or types of fuel (gasoline, diesel, or heating oil, or a combination thereof) that caused soil contamination, calculates the unit values based on the type of petroleum contamination specified in **D.3.a.(iii)** of this Section, documents the soil contamination complies with the acceptance criteria, and verifies that the samples are representative of the soils to be disposed of at the landfill. The waste management profile must be reviewed and approved by the permittee prior to acceptance at the landfill.

(iii) The required monitoring established in **D.4.a.(i) and (ii)** above, will be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:

(1) The calendar date of each batch of petroleum contaminated soil received.
(2) The weight, in tons, of each batch of petroleum contaminated soil received, for the corresponding date.
(3) The unit value supplied in the approved application submittal as specified in **D.4.a.(ii)** above for each batch of petroleum contaminated soil received, for the corresponding date.
(4) The total daily number of batches of accepted petroleum contaminated soil, for the corresponding date.
(5) The total daily weight, in tons, of all batches of accepted petroleum contaminated soil, for the corresponding date.
(6) The sum of unit values for all batches of accepted petroleum contaminated soil, for the corresponding date.
(7) Beginning January 1 of each year the sum of unit values calculated in **(6)** above shall be added at the end of each day, to provide a cumulative unit value total. The sum of unit values shall not exceed that specified in **D.3.a.(iv)** of this Section . If the unit value specified in **D.3.a.(iv)** of this Section is reached prior to December 31, the permittee will not accept any more petroleum contaminated soils.
(8) The analytical results of VOC emissions for each batch of accepted contaminated soil to demonstrate compliance with the emission limits specified in **D.2.a.(i)** of this Section.
(9) The analytical results of TPH concentrations for each batch of accepted contaminated soil to demonstrate compliance with the operating parameters specified in **D.3.a.(ii)** of this Section .

5. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Shielded Requirements

a. No Shielded Requirements are specified.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

E. Emission Unit #(s): S2.003 – S2.005
Location S2.003: North 4,374.950 km, East 275.514 km, UTM (Zone 11)
Location S2.004: North 4,374.927 km, East 275.537 km, UTM (Zone 11)
Location S2.005: North 4,374.904 km, East 275.514 km, UTM (Zone 11)

System 05 – Three (3) Diesel-fired Engines – to operate Truck Tippers		
S	2.003	130 hp Diesel Engine Tipper – [maximum allowable heat input is 0.35 MMBtu/hr; manufactured by Columbia; date manufactured – 1999; model # 3116; serial # 993020]
S	2.004	130 hp Diesel Engine Tipper – [maximum allowable heat input is 0.35 MMBtu/hr; manufactured by Columbia; date manufactured – 1995; model # 3116; serial # 2WG03616]
S	2.005	130 hp Diesel Engine Tipper – [maximum allowable heat input is 0.35 MMBtu/hr; manufactured by Columbia; date manufactured – 1994; model # 3116; serial # 2WG03285]

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Air Pollution Equipment
a. Emissions from **S2.003 – S2.005** shall be controlled using best operational practices.

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Emission Limits
a. On and after the date of startup of **S2.003**, Permittee will not discharge or cause the discharge into the atmosphere from **S2.003,** the following pollutants in excess of the following specified limits:
(i) NAC 445B.305 *Part 70 Program* - The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.109** pound per hour, nor more than **0.250** ton per year.
(ii) NAC 445B.305 *Part 70 Program* - The discharge of PM (particulate matter) to the atmosphere will not exceed **0.109** pound per hour, , nor more than **0.250** ton per year.
(iii) NAC 445B.305 *Part 70 Program* - The discharge of NO_x (nitrogen oxides) to the atmosphere will not exceed **1.544** pounds per hour, nor more than **3.550** tons per year.
(iv) NAC 445B.305 *Part 70 Program* - The discharge of CO (carbon monoxide) to the atmosphere will not exceed **0.333** pounds per hour, nor more than **0.77** ton per year.
(v) NAC 445B.305 *Part 70 Program* - The discharge of SO_2 (sulfur dioxide) to the atmosphere will not exceed **0.102** pounds per hour, , nor more than **0.233** ton per year.
(vi) NAC 445B.305 *Part 70 Program* - The discharge of VOCs (volatile organic compounds) to the atmosphere will not exceed **0.126** pound per hour, nor more than **0.290** ton per year.
(vii) NAC 445B.22017 *(Federally Enforceable SIP Requirement)* - The opacity from **S2.003** discharge will not equal or exceed **20%** in accordance with NAC 445B.22017.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

E. Emission Unit #(s): S2.003 – S2.005 (continued)

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Emission Limits (continued)

b. On and after the date of startup of **S2.004**, Permittee will not discharge or cause the discharge into the atmosphere from **S2.004,** the following pollutants in excess of the following specified limits:
(i) NAC 445B.305 *Part 70 Program* - The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.109** pound per hour, nor more than **0.250** ton per year.
(ii) NAC 445B.305 *Part 70 Program* - The discharge of PM (particulate matter) to the atmosphere will not exceed **0.109** pound per hour, , nor more than **0.250** ton per year.
(iii) NAC 445B.305 *Part 70 Program* - The discharge of NO_x (nitrogen oxides) to the atmosphere will not exceed **1.544** pounds per hour, nor more than **3.550** tons per year.
(iv) NAC 445B.305 *Part 70 Program* - The discharge of CO (carbon monoxide) to the atmosphere will not exceed **0.333** pounds per hour, nor more than **0.77** ton per year.
(v) NAC 445B.305 *Part 70 Program* - The discharge of SO_2 (sulfur dioxide) to the atmosphere will not exceed **0.102** pounds per hour, , nor more than **0.233** ton per year.
(vi) NAC 445B.305 *Part 70 Program* - The discharge of VOCs (volatile organic compounds) to the atmosphere will not exceed **0.126** pound per hour, nor more than **0.290** ton per year.
(vii) NAC 445B.22017 *(Federally Enforceable SIP Requirement)* - The opacity from **S2.004** discharge will not equal or exceed **20%** in accordance with NAC 445B.22017.

c. On and after the date of startup of **S2.005**, Permittee will not discharge or cause the discharge into the atmosphere from **S2.005,** the following pollutants in excess of the following specified limits:
(i) NAC 445B.305 *Part 70 Program* - The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.109** pound per hour, nor more than **0.250** ton per year.
(ii) NAC 445B.305 *Part 70 Program* - The discharge of PM (particulate matter) to the atmosphere will not exceed **0.109** pound per hour, , nor more than **0.250** ton per year.
(iii) NAC 445B.305 *Part 70 Program* - The discharge of NO_x (nitrogen oxides) to the atmosphere will not exceed **1.544** pounds per hour, nor more than **3.550** tons per year.
(iv) NAC 445B.305 *Part 70 Program* - The discharge of CO (carbon monoxide) to the atmosphere will not exceed **0.333** pounds per hour, nor more than **0.77** ton per year.
(v) NAC 445B.305 *Part 70 Program* - The discharge of SO_2 (sulfur dioxide) to the atmosphere will not exceed **0.102** pounds per hour, , nor more than **0.233** ton per year.
(vi) NAC 445B.305 *Part 70 Program* - The discharge of VOCs (volatile organic compounds) to the atmosphere will not exceed **0.126** pound per hour, nor more than **0.290** ton per year.
(vii) NAC 445B.22017 *(Federally Enforceable SIP Requirement)* - The opacity from **S2.005** discharge will not equal or exceed **20%** in accordance with NAC 445B.22017.

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Section VI. Specific Operating Conditions (continued)

E. Emission Unit #(s): S2.003 – S2.005 (continued)

3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Operating Parameters
a. Maximum allowable fuel usage rate for **S2.003 – S2.005** each will not exceed **2.5** gallons of **# 2 diesel fuel** per any one-hour period.
b. The maximum sulfur content in the #2 diesel fuel for **S2.003 – S2.005** each will not exceed 0.5% by weight.
c. **Hours**
(i) **S2.003 – S2.005** each may operate a maximum of **24** hours per day.
(ii) **S2.003 – S2.005** each may operate a total of **4,600** hours per calendar year.

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Recordkeeping and Compliance
Permittee, upon the issuance date of this permit will:
a. Monitor and record the fuel usage rate of **#2 diesel fuel** for **S2.003 – S2.005** on a daily basis.
b. Monitor and record the hours of operation for **S2.003 – S2.005** on a daily and yearly basis.
c. The required monitoring established in **E.4.a. through E.4.b.** above, will be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:
(i) The calendar date of any required monitoring.
(ii) The total daily fuel usage rate of **#2 diesel fuel** in gallons, for the corresponding date.
(iii) The total daily hours of operation for the corresponding date.
(iv) The corresponding average hourly fuel usage rate in gallons per hour. The average hourly fuel usage rate will be determined from the total daily fuel usage rate and the total daily hours of operation recorded in **E.4.c.(ii) and (iii)** above. The yearly hours of operation for **S2.003 – S2.005** will be determined as the sum of the daily hours of operation totals for the 365 immediately preceding calendar days.

5. National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories
NESHAP for *Stationary Reciprocating Internal Combustion Engines (RICE)*, 40 CFR Part 63, Subpart ZZZZ
(40 CFR 63.6580, et. seq.) – *Existing* stationary RICE located at an *Area Source* of HAP emissions (40 CFR 63.6590(a)(1)(iii))
a. Permittee will be required to comply with the applicable operating limitations no later than May 3, 2013 (40 CFR 63.6595(a)(1)).
b. *Operating Limits* for **S2.003 – S2.005** – 40 CFR Part 63, Subpart ZZZZ
Permittee shall comply with the following operating limitations set forth in Table 2d (existing non-emergency CI RICE less than or equal to 300 HP) of 40 CFR Part 63, Subpart ZZZZ for **S2.003 – S2.005** (40 CFR 63.6603(a)):
(1) Change oil and filter every 1000 hours of operation or annually, whichever comes first;
(2) Inspect air cleaner every 1000 hours of operation or annually, whichever comes first; and
(3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
(4) Permittee has the option of utilizing an oil analysis program to extend the specified oil change requirement in 5.b.(1) above. The oil analysis program should be performed in the manner specified in 40 CFR 63.6625(i).

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Section VI. Specific Operating Conditions (continued)

E. Emission Unit #(s): S2.003 – S2.005 (continued)

5. National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories
NESHAP for *Stationary Reciprocating Internal Combustion Engines (RICE)*, 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6580, et. seq.) – *Existing* stationary RICE located at an *Area Source* of HAP emissions (40 CFR 63.6590(a)(1)(iii))(continued)

c. *General Compliance Requirements* for **S2.003 – S2.005** - 40 CFR Part 63, Subpart ZZZZ
   (1) You (Permittee) must be in compliance with the emission limitations and operating limitations in 40 CFR Part 63, Subpart ZZZZ, that apply to you at all times (40 CFR 63.6605(a)).
   (2) At all times you (Permittee) must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source (40 CFR 63.6605(b)).

d. *Operation Requirements* for **S2.003 – S2.005** - 40 CFR Part 63, Subpart ZZZZ
   (1) If you (Permittee) own or operate an existing stationary RICE located at an area source of HAP emissions not subject to any numerical emission standards shown in Table 2d of Subpart ZZZZ, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR 63.6625(e)).

e. *Continuous Compliance Requirements* for **S2.003 – S2.005** – 40 CFR Part 63, Subpart ZZZZ
   (1) You (Permittee) must demonstrate continuous compliance with the operating limitation in Table 2d of Subpart ZZZZ. Demonstration of compliance with work or management practices, as required in C.5.d. above, shall be done according to the following methods in Table 6 of Subpart ZZZZ (40 CFR 63.6640(a)):
      (i) Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
      (ii) Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
   (2) You (Permittee) must report each instance in which you did not meet the operating limitation in Table 2d of Subpart ZZZZ. These instances are deviations from the emission and operating limitations in Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650 (40 CFR 63.6640(b)).
   (3) You (Permittee) must also report each instance in which you did not meet the requirements in Table 8 to Subpart ZZZZ that apply to you (40 CFR 63.6640(e)). Table 8 to Subpart ZZZZ contains those applicable general provisions of 40 CFR Part 63, Subpart A.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

E. Emission Unit #(s): S2.003 – S2.005 (continued)

5 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories
NESHAP for *Stationary Reciprocating Internal Combustion Engines (RICE)*, 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6580, et. seq.) – *Existing* stationary RICE located at an *Area Source* of HAP emissions (40 CFR 63.6590(a)(1)(iii))(continued)

f. *Reporting* for **S2.003 – S2.005** – 40 CFR Part 63, Subpart ZZZZ
(1) Compliance reports shall be submitted semi-annually in accordance with the requirements in Section V.C. of this *Part 70* operating permit (40 CFR 63.6650(b)(5)).
(2) The semi-annual compliance report should contain, at a minimum, the following information:
(i) Company name and address (40 CFR 63.6650(c)(1)).
(ii) Statement by the responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report (40 CFR 63.6650(c)(2)).
(iii) Date of report and beginning and ending dates of the reporting period (40 CFR 63.6650(c)(3)).
(3) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period should be included in the semi-annual compliance report (40 CFR 63.6650(c)(5)).
(4) For each deviation, the compliance report must contain the total operating time of the stationary RICE at which the deviation occurred during the reporting period, and information on the number, duration, and cause of deviations (including unknown cause, if applicable), and the corrective action taken (40 CFR 63.6650(d)).
(5) Permittee must report all deviations, including failure to perform periodic inspections and maintenance required in D.5.b. above, and failure to operate **S2.003 – S2.005** according to the work or management practices developed either by the Permittee or the manufacturer. Deviations shall be reported semi-annually in accordance with the requirements in Section V.C. of this *Part 70* operating permit (40 CFR 63.6650(f)).

g. *Recordkeeping* for **S2.003 – S2.005** – 40 CFR Part 63, Subpart ZZZZ
(1) Permittee shall keep records of the following:
(i) You (Permittee) must keep records to show continuous compliance with each operating limitation and work or management practice that applies to you (40 CFR 63.6655(d)).
(ii) You (Permittee) must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate an existing stationary CI RICE (40 CFR 63.6655(e)(3)).
(iii) Records must be in a form suitable and readily available for expeditious review; you (Permittee) must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; you must keep each record readily accessible in hardcopy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record (40 CFR 63.6660).

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Section VI. Specific Operating Conditions (continued)

E. Emission Unit #(s): S2.003 – S2.005 (continued)

6. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

Shielded Requirements

a. No Shielded Requirements are specified.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

F. Emission Unit #(s): S2.006 – S2.008
Location S2.006: North 4,374.950 km, East 275.537 km, UTM (Zone 11)
Location S2.007: North 4,374.927 km, East 275.514 km, UTM (Zone 11)
Location S2.008: North 4,374.904 km, East 275.537 km, UTM (Zone 11)

System 06 – Three (3) Diesel-fired Engines – to operate Light Plants		
S	2.006	10.5 hp Diesel Powered Light Plant – [maximum allowable heat input is 0.07 MMBtu/hr; manufactured by Kubota; date manufactured – 1999; model # Kubota 6630; serial # 0001NL03]
S	2.007	10.5 hp Diesel Powered Light Plant – [maximum allowable heat input is 0.07 MMBtu/hr; manufactured by Allmand; date manufactured – 1990; model # Allmand 6330; serial # 0081N102]
S	2.008	10.5 hp Diesel Powered Light Plant – [maximum allowable heat input is 0.07 MMBtu/hr; manufactured by Allmand; date manufactured – 1997; model # Allmand 4C; serial # 9806BN4C37]

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Air Pollution Equipment
a. Emissions from **S2.006 – S2.008** shall be controlled using best operational practices.

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Emission Limits
a. On and after the date of startup of **S2.006**, Permittee will not discharge or cause the discharge into the atmosphere from **S2.006,** the following pollutants in excess of the following specified limits:
(i) NAC 445B.305 *Part 70 Program* - The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.022** pound per hour, nor more than **0.033** ton per year.
(ii) NAC 445B.305 *Part 70 Program* - The discharge of PM (particulate matter) to the atmosphere will not exceed **0.022** pound per hour, , nor more than **0.033** ton per year.
(iii) NAC 445B.305 *Part 70 Program* - The discharge of NO_x (nitrogen oxides) to the atmosphere will not exceed **0.309** pounds per hour, nor more than **0.463** tons per year.
(iv) NAC 445B.305 *Part 70 Program* - The discharge of CO (carbon monoxide) to the atmosphere will not exceed **0.067** pounds per hour, nor more than **0.1** ton per year.
(v) NAC 445B.305 *Part 70 Program* - The discharge of SO_2 (sulfur dioxide) to the atmosphere will not exceed **0.020** pounds per hour, , nor more than **0.030** ton per year.
(vi) NAC 445B.305 *Part 70 Program* - The discharge of VOCs (volatile organic compounds) to the atmosphere will not exceed **0.025** pound per hour, nor more than **0.038** ton per year.
(vii) NAC 445B.22017 *(Federally Enforceable SIP Requirement)* - The opacity from **S2.006** discharge will not equal or exceed **20%** in accordance with NAC 445B.22017.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

F. Emission Unit #(s): S2.006 – S2.008 (continued)

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Emission Limits (continued)

b. On and after the date of startup of **S2.007**, Permittee will not discharge or cause the discharge into the atmosphere from **S2.007** the following pollutants in excess of the following specified limits:

(i) NAC 445B.305 *Part 70 Program* - The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.022** pound per hour, nor more than **0.033** ton per year.

(ii) NAC 445B.305 *Part 70 Program* - The discharge of PM (particulate matter) to the atmosphere will not exceed **0.022** pound per hour, nor more than **0.033** ton per year.

(iii) NAC 445B.305 *Part 70 Program* - The discharge of NO_x (nitrogen oxides) to the atmosphere will not exceed **0.309** pounds per hour, nor more than **0.463** tons per year.

(iv) NAC 445B.305 *Part 70 Program* - The discharge of CO (carbon monoxide) to the atmosphere will not exceed **0.067** pounds per hour, nor more than **0.1** ton per year.

(v) NAC 445B.305 *Part 70 Program* - The discharge of SO_2 (sulfur dioxide) to the atmosphere will not exceed **0.020** pounds per hour, , nor more than **0.030** ton per year.

(vi) NAC 445B.305 *Part 70 Program* - The discharge of VOCs (volatile organic compounds) to the atmosphere will not exceed **0.025** pound per hour, nor more than **0.038** ton per year.

(vii) NAC 445B.22017 *(Federally Enforceable SIP Requirement)* - The opacity from **S2.007** discharge will not equal or exceed **20%** in accordance with NAC 445B.22017.

c. On and after the date of startup of **S2.008**, Permittee will not discharge or cause the discharge into the atmosphere from **S2.008** the following pollutants in excess of the following specified limits:

(i) NAC 445B.305 *Part 70 Program* - The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.022** pound per hour, nor more than **0.033** ton per year.

(ii) NAC 445B.305 *Part 70 Program* - The discharge of PM (particulate matter) to the atmosphere will not exceed **0.022** pound per hour, nor more than **0.033** ton per year.

(iii) NAC 445B.305 *Part 70 Program* - The discharge of NO_x (nitrogen oxides) to the atmosphere will not exceed **0.309** pounds per hour, nor more than **0.463** tons per year.

(iv) NAC 445B.305 *Part 70 Program* - The discharge of CO (carbon monoxide) to the atmosphere will not exceed **0.067** pounds per hour, nor more than **0.1** ton per year.

(v) NAC 445B.305 *Part 70 Program* - The discharge of SO_2 (sulfur dioxide) to the atmosphere will not exceed **0.020** pounds per hour, , nor more than **0.030** ton per year.

(vi) NAC 445B.305 *Part 70 Program* - The discharge of VOCs (volatile organic compounds) to the atmosphere will not exceed **0.025** pound per hour, nor more than **0.038** ton per year.

(vii) NAC 445B.22017 *(Federally Enforceable SIP Requirement)* - The opacity from **S2.008** discharge will not equal or exceed **20%** in accordance with NAC 445B.22017.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

F. Emission Unit #(s): S2.006 – S2.008 (continued)

3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

Operating Parameters

a. Maximum allowable fuel usage rate for **S2.006 – S2.008** each will not exceed **0.5** gallons of **# 2 diesel fuel** per any one-hour period.

b. The maximum sulfur content in the #2 diesel fuel for **S2.006 – S2.008** each will not exceed 0.5% by weight.

c. **Hours**

(i) **S2.006 – S2.008** each may operate a maximum of **24** hours per day.

(ii) **S2.006 – S2.008** each may operate a total of **3,000** hours per calendar year.

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

Monitoring, Recordkeeping and Compliance

Permittee, upon the issuance date of this permit will:

a. Monitor and record the fuel usage rate of **#2 diesel fuel** for **S2.006 – S2.008** on a daily basis.

b. Monitor and record the hours of operation for **S2.006 – S2.008** on a daily and yearly basis.

c. The required monitoring established in **F.4.a. through F.4.b.** above, will be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:

(i) The calendar date of any required monitoring.

(ii) The total daily fuel usage rate of **#2 diesel fuel** in gallons, for the corresponding date.

(iii) The total daily hours of operation for the corresponding date.

(iv) The corresponding average hourly fuel usage rate in gallons per hour. The average hourly fuel usage rate will be determined from the total daily fuel usage rate and the total daily hours of operation recorded in **F.4.c.(ii) and (iii)** above. The yearly hours of operation for **S2.006 – S2.008** will be determined as the sum of the daily hours of operation totals for the 365 immediately preceding calendar days.

5. National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories

NESHAP for *Stationary Reciprocating Internal Combustion Engines (RICE)*, 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6580, et. seq.) – *Existing* stationary RICE located at an *Area Source* of HAP emissions (40 CFR 63.6590(a)(1)(iii))

a. Permittee will be required to comply with the applicable operating limitations no later than May 3, 2013 (40 CFR 63.6595(a)(1)).

b. *Operating Limits* for **S2.006 – S2.008** – 40 CFR Part 63, Subpart ZZZZ

Permittee shall comply with the following operating limitations set forth in Table 2d (existing non-emergency CI RICE less than or equal to 300 HP) of 40 CFR Part 63, Subpart ZZZZ for **S2.006 – S2.008** (40 CFR 63.6603(a)):

(1) Change oil and filter every 1000 hours of operation or annually, whichever comes first;

(2) Inspect air cleaner every 1000 hours of operation or annually, whichever comes first; and

(3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

(4) Permittee has the option of utilizing an oil analysis program to extend the specified oil change requirement in 5.b.(1) above. The oil analysis program should be performed in the manner specified in 40 CFR 63.6625(i).

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

F. Emission Unit #(s): S2.006 – S2.008 (continued)

5. National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories
NESHAP for *Stationary Reciprocating Internal Combustion Engines (RICE)*, 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6580, et. seq.) – *Existing* stationary RICE located at an *Area Source* of HAP emissions (40 CFR 63.6590(a)(1)(iii))(continued)

c. *General Compliance Requirements* for **S2.006 – S2.008** - 40 CFR Part 63, Subpart ZZZZ
   (1) You (Permittee) must be in compliance with the emission limitations and operating limitations in 40 CFR Part 63, Subpart ZZZZ, that apply to you at all times (40 CFR 63.6605(a)).
   (2) At all times you (Permittee) must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source (40 CFR 63.6605(b)).

d. *Operation Requirements* for **S2.006 – S2.008** - 40 CFR Part 63, Subpart ZZZZ
   (1) If you (Permittee) own or operate an existing stationary RICE located at an area source of HAP emissions not subject to any numerical emission standards shown in Table 2d of Subpart ZZZZ, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR 63.6625(e)).

e. *Continuous Compliance Requirements* for **S2.006 – S2.008** – 40 CFR Part 63, Subpart ZZZZ
   (1) You (Permittee) must demonstrate continuous compliance with the operating limitation in Table 2d of Subpart ZZZZ. Demonstration of compliance with work or management practices, as required in C.5.d. above, shall be done according to the following methods in Table 6 of Subpart ZZZZ (40 CFR 63.6640(a)):
      (i) Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
      (ii) Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
   (2) You (Permittee) must report each instance in which you did not meet the operating limitation in Table 2d of Subpart ZZZZ. These instances are deviations from the emission and operating limitations in Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650 (40 CFR 63.6640(b)).
   (3) You (Permittee) must also report each instance in which you did not meet the requirements in Table 8 to Subpart ZZZZ that apply to you (40 CFR 63.6640(e)). Table 8 to Subpart ZZZZ contains those applicable general provisions of 40 CFR Part 63, Subpart A.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

F. Emission Unit #(s): S2.006 – S2.008 (continued)

5. National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories
NESHAP for *Stationary Reciprocating Internal Combustion Engines (RICE)*, 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6580, et. seq.) – *Existing* stationary RICE located at an *Area Source* of HAP emissions (40 CFR 63.6590(a)(1)(iii))(continued)

g. *Reporting* for **S2.006 – S2.008** – 40 CFR Part 63, Subpart ZZZZ
(1) Compliance reports shall be submitted semi-annually in accordance with the requirements in Section V.C. of this *Part 70* operating permit (40 CFR 63.6650(b)(5)).
(2) The semi-annual compliance report should contain, at a minimum, the following information:
(i) Company name and address (40 CFR 63.6650(c)(1)).
(ii) Statement by the responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report (40 CFR 63.6650(c)(2)).
(iii) Date of report and beginning and ending dates of the reporting period (40 CFR 63.6650(c)(3)).
(3) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period should be included in the semi-annual compliance report (40 CFR 63.6650(c)(5)).
(4) For each deviation, the compliance report must contain the total operating time of the stationary RICE at which the deviation occurred during the reporting period, and information on the number, duration, and cause of deviations (including unknown cause, if applicable), and the corrective action taken (40 CFR 63.6650(d)).
(5) Permittee must report all deviations, including failure to perform periodic inspections and maintenance required in D.5.b. above, and failure to operate **S2.006 – S2.008** according to the work or management practices developed either by the Permittee or the manufacturer. Deviations shall be reported semi-annually in accordance with the requirements in Section V.C. of this *Part 70* operating permit (40 CFR 63.6650(f)).

g. *Recordkeeping* for **S2.006 – S2.008** – 40 CFR Part 63, Subpart ZZZZ
(1) Permittee shall keep records of the following:
(i) You (Permittee) must keep records to show continuous compliance with each operating limitation and work or management practice that applies to you (40 CFR 63.6655(d)).
(ii) You (Permittee) must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate an existing stationary CI RICE (40 CFR 63.6655(e)(3)).
(iii) Records must be in a form suitable and readily available for expeditious review; you (Permittee) must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; you must keep each record readily accessible in hardcopy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record (40 CFR 63.6660).

6. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Shielded Requirements
a. No Shielded Requirements are specified.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

G. Emission Unit #(s): S2.009, location North 4,375.202 km, East 274.778 km, UTM (Zone 11)

System 07 – Diesel Generator – to be used for various purposes		
S	2.009	96 hp Diesel Generator – [maximum allowable heat input is 0.56 MMBtu/hr; manufactured by Caterpillar; date manufactured – 1995; model # CT60; serial # 2014702]

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Air Pollution Equipment
a. Emissions from **S2.009** shall be controlled using best operational practices.

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Emission Limits
a. On and after the date of startup of **S2.009**, Permittee will not discharge or cause the discharge into the atmosphere from **S2.009,** the following pollutants in excess of the following specified limits:
(i) NAC 445B.305 *Part 70 Program* - The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.174** pound per hour, nor more than **0.26** ton per year.
(ii) NAC 445B.305 *Part 70 Program* - The discharge of PM (particulate matter) to the atmosphere will not exceed **0.174** pound per hour, , nor more than **0.260** ton per year.
(iii) NAC 445B.305 *Part 70 Program* - The discharge of NO_x (nitrogen oxides) to the atmosphere will not exceed **2.47** pounds per hour, nor more than **3.704** tons per year.
(iv) NAC 445B.305 *Part 70 Program* - The discharge of CO (carbon monoxide) to the atmosphere will not exceed **0.532** pounds per hour, **0.80** ton per year.
(v) NAC 445B.305 *Part 70 Program* - The discharge of SO_2 (sulfur dioxide) to the atmosphere will not exceed **0.162** pounds per hour, , nor more than **0.244** ton per year.
(vi) NAC 445B.305 *Part 70 Program* - The discharge of VOCs (volatile organic compounds) to the atmosphere will not exceed **0.202** pound per hour, nor more than **0.302** ton per year.
(vii) NAC 445B.22017 *(Federally Enforceable SIP Requirement)* - The opacity from **S2.009** discharge will not equal or exceed **20%** in accordance with NAC 445B.22017.

3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Operating Parameters
a. Maximum allowable fuel usage rate for **S2.009** will not exceed **4.0** gallons of **# 2 diesel fuel** per any one-hour period.
b. The maximum sulfur content in the #2 diesel fuel for **S2.009** will not exceed 0.5% by weight.
c. **Hours**
(i) **S2.009** may operate a maximum of **10** hours per day.
(ii) **S2.009** may operate a total of **3,000** hours per calendar year.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

G. Emission Unit #(s): S2.009 (continued)

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Recordkeeping and Compliance
Permittee, upon the issuance date of this permit will:

a. Monitor and record the fuel usage rate of **#2 diesel fuel** for **S2.009** on a daily basis.
b. Monitor and record the hours of operation for **S2.009** on a daily and yearly basis.
c. The required monitoring established in **G.4.a. through G.4.b.** above, will be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:
   (i) The calendar date of any required monitoring.
   (ii) The total daily fuel usage rate of **#2 diesel fuel** in gallons, for the corresponding date.
   (iii) The total daily hours of operation for the corresponding date.
   (iv) The corresponding average hourly fuel usage rate in gallons per hour. The average hourly fuel usage rate will be determined from the total daily fuel usage rate and the total daily hours of operation recorded in **G.4.c.(ii) and (iii)** above. The yearly hours of operation for **S2.009** will be determined as the sum of the daily hours of operation totals for the 365 immediately preceding calendar days.

5. National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories
NESHAP for *Stationary Reciprocating Internal Combustion Engines (RICE)*, 40 CFR Part 63, Subpart ZZZZ
(40 CFR 63.6580, et. seq.) – *Existing* stationary RICE located at an *Area Source* of HAP emissions (40 CFR 63.6590(a)(1)(iii))

a. Permittee will be required to comply with the applicable operating limitations no later than May 3, 2013 (40 CFR 63.6595(a)(1)).
b. *Operating Limits* for **S2.009** – 40 CFR Part 63, Subpart ZZZZ
   Permittee shall comply with the following operating limitations set forth in Table 2d (existing non-emergency CI RICE less than or equal to 300 HP) of 40 CFR Part 63, Subpart ZZZZ for **S2.009** (40 CFR 63.6603(a)):
   (1) Change oil and filter every 1000 hours of operation or annually, whichever comes first;
   (2) Inspect air cleaner every 1000 hours of operation or annually, whichever comes first; and
   (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
   (4) Permittee has the option of utilizing an oil analysis program to extend the specified oil change requirement in 5.b.(1) above. The oil analysis program should be performed in the manner specified in 40 CFR 63.6625(i).

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

G. Emission Unit #(s): S2.009 (continued)

5. National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories
NESHAP for *Stationary Reciprocating Internal Combustion Engines (RICE)*, 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6580, et. seq.) – *Existing* stationary RICE located at an *Area Source* of HAP emissions (40 CFR 63.6590(a)(1)(iii))(continued)

c. *General Compliance Requirements* for **S2.009 –** 40 CFR Part 63, Subpart ZZZZ
   (1) You (Permittee) must be in compliance with the emission limitations and operating limitations in 40 CFR Part 63, Subpart ZZZZ, that apply to you at all times (40 CFR 63.6605(a)).
   (2) At all times you (Permittee) must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source (40 CFR 63.6605(b)).

d. *Operation Requirements* for **S2.009 –** 40 CFR Part 63, Subpart ZZZZ
   (1) If you (Permittee) own or operate an existing stationary RICE located at an area source of HAP emissions not subject to any numerical emission standards shown in Table 2d of Subpart ZZZZ, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR 63.6625(e)).

e. *Continuous Compliance Requirements* for **S2.009** – 40 CFR Part 63, Subpart ZZZZ
   (1) You (Permittee) must demonstrate continuous compliance with the operating limitation in Table 2d of Subpart ZZZZ. Demonstration of compliance with work or management practices, as required in C.5.d. above, shall be done according to the following methods in Table 6 of Subpart ZZZZ (40 CFR 63.6640(a)):
      (i) Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
      (ii) Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
   (2) You (Permittee) must report each instance in which you did not meet the operating limitation in Table 2d of Subpart ZZZZ. These instances are deviations from the emission and operating limitations in Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650 (40 CFR 63.6640(b)).
   (3) You (Permittee) must also report each instance in which you did not meet the requirements in Table 8 to Subpart ZZZZ that apply to you (40 CFR 63.6640(e)). Table 8 to Subpart ZZZZ contains those applicable general provisions of 40 CFR Part 63, Subpart A.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

G. Emission Unit #(s): S2.009 (continued)

5. National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories
NESHAP for *Stationary Reciprocating Internal Combustion Engines (RICE)*, 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6580, et. seq.) – *Existing* stationary RICE located at an *Area Source* of HAP emissions (40 CFR 63.6590(a)(1)(iii))(continued)

h. *Reporting* for **S2.009** – 40 CFR Part 63, Subpart ZZZZ
(1) Compliance reports shall be submitted semi-annually in accordance with the requirements in Section V.C. of this *Part 70* operating permit (40 CFR 63.6650(b)(5)).
(2) The semi-annual compliance report should contain, at a minimum, the following information:
(i) Company name and address (40 CFR 63.6650(c)(1)).
(ii) Statement by the responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report (40 CFR 63.6650(c)(2)).
(iii) Date of report and beginning and ending dates of the reporting period (40 CFR 63.6650(c)(3)).
(3) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period should be included in the semi-annual compliance report (40 CFR 63.6650(c)(5)).
(4) For each deviation, the compliance report must contain the total operating time of the stationary RICE at which the deviation occurred during the reporting period, and information on the number, duration, and cause of deviations (including unknown cause, if applicable), and the corrective action taken (40 CFR 63.6650(d)).
(5) Permittee must report all deviations, including failure to perform periodic inspections and maintenance required in D.5.b. above, and failure to operate **S2.009** according to the work or management practices developed either by the Permittee or the manufacturer. Deviations shall be reported semi-annually in accordance with the requirements in Section V.C. of this *Part 70* operating permit (40 CFR 63.6650(f)).

g. *Recordkeeping* for **S2.009** – 40 CFR Part 63, Subpart ZZZZ
(1) Permittee shall keep records of the following:
(i) You (Permittee) must keep records to show continuous compliance with each operating limitation and work or management practice that applies to you (40 CFR 63.6655(d)).
(ii) You (Permittee) must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate an existing stationary CI RICE (40 CFR 63.6655(e)(3)).
(iii) Records must be in a form suitable and readily available for expeditious review; you (Permittee) must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; you must keep each record readily accessible in hardcopy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record (40 CFR 63.6660).

6. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Shielded Requirements
a. No Shielded Requirements are specified.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

H. Emission Unit #(s): S2.010, location North 4,374.740 km, East 274.752 km, UTM (Zone 11)

System 08 – Landfill Gas Candlestick Flare		
S	2.010	Candlestick Flare, Manufactured by- Perennial, Model no.- FL-10-C, Serial no.- FL-1587, Date manufactured- 2008, Maximum design heat input rate- 63.0 MMBtu/hr.

1. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Air Pollution Equipment

a. Emissions from **S2.010** shall be controlled using best operational practices.

Stack Parameters (typical conditions)

Height (feet from ground level):	29.0	Velocity (ft/sec):	10.25
Inside Diameter (feet):	0.83	Gas Volume Rate (cu. ft/min):	2,100 dscfm
Temperature (°F):	1,360		

2. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Emission Limits

a. On and after the date of startup of **S2.010**, Permittee will not discharge or cause the discharge into the atmosphere from **S2.009,** the following pollutants in excess of the following specified limits:

(1) NAC 445B.305 *Part 70 Program* - The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **2.10** pounds per hour, nor more than **9.20** tons per year.

(2) NAC 445B.305 *Part 70 Program* - The discharge of PM (particulate matter) to the atmosphere will not exceed **2.10** pounds per hour, nor more than **9.20** tons per year.

(3) NAC 445B.305 *Part 70 Program* - The discharge of NO_x (nitrogen oxides) to the atmosphere will not exceed **4.41** pounds per hour, nor more than **19.32** tons per year.

(4) NAC 445B.305 *Part 70 Program* - The discharge of CO (carbon monoxide) to the atmosphere will not exceed **23.31** pounds per hour, nor more than **102.1** tons per year.

(5) NAC 445B.305 *Part 70 Program* - The discharge of SO_2 (sulfur dioxide) to the atmosphere will not exceed **19.77** pounds per hour, nor more than **86.60** tons per year.

(6) NAC 445B.305 *Part 70 Program* - The discharge of VOCs (volatile organic compounds) to the atmosphere will not exceed **0.46** pounds per hour, nor more than **2.00** tons per year.

(7) NAC 445B.22017 *(Federally Enforceable SIP Requirement)* - The opacity from **S2.010** discharge will not equal or exceed **20%** in accordance with NAC 445B.22017.

b. Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60 Subpart WWW)

(1) **§ 60.752(b) and § 60.753** - The permittee shall comply with all applicable requirements listed in **A.2.b.(1)(i) through (v)** and **A.2.b.(2)(i) through (vii)** of this Section. An open flare shall be designed and operated in accordance with **40 CFR Part 60 §60.18** (General Control Device Requirements) except as noted in **A.4.d.(1)(iv)** of this Section.

c. National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (40 CFR Part 63 Subpart AAAA)

(1) **§ 63.1955** - The permittee shall comply with all applicable requirements listed in **A.2.c.(1)(i) through (iii)** of this Section.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

H. Emission Unit #(s): S2.010 (continued)

3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
General Control Device Requirements (40 CFR Part 60 Subpart A § 60.18)

a. **§ 60.18(c)**

(1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph **H.3.d.** below, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph **H.3.d.** below.

(3) The permittee has the choice of adhering to either the heat content specifications in paragraph **(ii)** specified below and the maximum tip velocity specifications in paragraph **H.3.a.(4)** specified below, or adhering to the requirements in paragraphs **(i)(a) and (b)** specified below.

(i)(a) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity, Vmax, as determined by the following equation:

$$V_{max} = (X_{H2} - K_1) * K_2$$

Where:

V_{max} = Maximum permitted velocity, m/sec.

K_1 = Constant, 6.0 volume-percent hydrogen.

K_2 = Constant, 3.9(m/sec)/volume-percent hydrogen.

X_{H2} = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946–77. (Incorporated by reference as specified in §60.17).

(b) The actual exit velocity of a flare shall be determined by the method specified in paragraph **H.3.d.(4)** below.

(ii) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph **H.3.d.(3)** below.

(4)(i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph **H.3.d.(4)** below, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs **(4)(ii) and (iii)** below.

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph **H.3.d.(4)** below, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph **H.3.d.(4)** below, less than the velocity, Vmax, as determined by the method specified in paragraph **H.3.d.(5)** below, and less than 122 m/sec (400 ft/sec) are allowed.

(5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, Vmax, as determined by the method specified in paragraph **H.3.d.(6)** below.

(6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

H. Emission Unit #(s): S2.010 (continued)

3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
General Control Device Requirements (40 CFR Part 60 Subpart A § 60.18) **(continued)**

b. The permittee of flares used to comply with the provisions of Subpart A § 60.18 shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.

c. Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

d. **§ 60.18(f)**

(1) Method 22 of appendix A of 40 CFR Part 60 shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.

(2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^{n} C_i H_i$$

where:

H_T = Net heating value of the sample, MJ/scm;
where the net enthalpy per mole of off gas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;

$$K = \text{Constant}, 1.740 \times 10^{-7} \left(\frac{1}{ppm}\right) \left(\frac{g\ mole}{scm}\right) \left(\frac{MJ}{kcal}\right)$$

where the standard temperature for $\left(\frac{g\ mole}{scm}\right)$ is 20°C;

C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946–77 or 90 (Reapproved 1994) (Incorporated by reference as specified in §60.17); and

H_i = Net heat of combustion of sample component i, kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382–76 or 88 or D4809–95 (incorporated by reference as specified in §60.17) if published values are not available or cannot be calculated.

(4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

H. Emission Unit #(s): S2.010 (continued)

3. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
General Control Device Requirements (40 CFR Part 60 Subpart A § 60.18) **(continued)**

d. **§ 60.18(f) (continued)**

(5) The maximum permitted velocity, Vmax, for flares complying with paragraph **(c)(4)(iii)** shall be determined by the following equation.

$\text{Log}_{10}(\text{Vmax}) = (H_T + 28.8) / 31.7$

Vmax = Maximum permitted velocity, M/sec

28.8 = Constant

31.7 = Constant

H_T = The net heating value as determined in paragraph **H.3.d.(3)** above.

(6) The maximum permitted velocity, Vmax, for air-assisted flares shall be determined by the following equation.

$\text{Vmax} = 8.706 + 0.7084 (H_T)$

Vmax = Maximum permitted velocity, m/sec

8.706 = Constant

0.7084 = Constant

H_T = The net heating value as determined in paragraph **H.3.d.(3)** above.

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Operating Parameters

a. The maximum allowable heat input rate for **S2.010** will not exceed **63.0** millions Btu (MMBtu) per any one-hour period.

b. **Hours**

(1) **S2.010** may operate **8,760** hours per calendar year.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

H. Emission Unit #(s): S2.010 (continued)

5. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

Monitoring, Recordkeeping and Compliance

Permittee, upon the issuance date of this permit will:

a. Calculate the heat input rate in MMBtu [re: **H.3.d.(3)** of this Section] for **S2.010** on a monthly basis.

b. Monitor and record the hours of operation for **S2.010** on a monthly and yearly basis.

c. Monitor and record the methane content using a field instrument on a monthly basis.

d. Monitor and record the monthly cumulative flow of the landfill gas [re: H.5.f.(2)] using a flow monitoring/recording device[re: **H.5.f.(2)** of this Section] .

e. The required monitoring established in **H.5.a. through H.5.d.** above, will be maintained in a contemporaneous log containing, at a minimum, the following recordkeeping:

(1) The calendar date of any required monitoring.

(2) The total monthly heat input rate in MMBtu.

(3) The total monthly hours of operation for the corresponding month.

(4) The corresponding average hourly heat input rate in MMBtu per hour. The average hourly heat input rate will be determined from the total monthly heat input rate and the total monthly hours of operation recorded in **H.5.e.(2) and (3)** above.

f. Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60 Subpart WWW)

(1) **§ 60.754 and § 60.755** - The permittee shall comply with all applicable requirements listed in **A.4.d.(1)(i) through (iv)** and **A.4.d.(2)(i) through (v)** of this Section.

(2) Monitoring of Operations [**§ 60.756**]: The permittee shall comply with all applicable requirements listed in **A.4.d.(3)(i) through (vi)** of this Section.

§ 60.756(c) - The permittee seeking to comply with **A.2.b.(1)(iii)** of this Section using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

(i) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.

(ii) A device that records flow to or bypass of the flare. The permittee shall either:

(a) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or

(b) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

§ 60.756(d) - The permittee seeking to demonstrate compliance with **A.2.b.(1)(iii)** of this Section using a device other than an open flare or an enclosed combustor shall provide information satisfactory to the Director as provided in **A.2.b.(1)(i)(b)** of this Section describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Director may specify additional appropriate monitoring procedures.

(3) Reporting Requirements [**§ 60.757**]: The permittee shall comply with all applicable requirements listed in **A.4.d.(4)(i) through (v)** of this Section.

Issued to: Refuse Inc., as Permittee

Section VI. Specific Operating Conditions (continued)

H. Emission Unit #(s): S2.010 (continued)

5. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Monitoring, Recordkeeping and Compliance (continued)

f. Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60 Subpart WWW) **(continued)**

(4) Recordkeeping Requirements [**§ 60.758**]: The permittee shall comply with all applicable requirements listed in **A.4.d.(5)(i) through (v)** of this Section.
§ 60.758(b)(4) - Where the permittee seeks to demonstrate compliance with **A.2..b.(1)(iii)(a)** of this Section through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in **§60.18**; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.
§ 60.758(c)(4) - The permittee seeking to comply with the provisions **A.2.b.** of this Section by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under **A.4.d.(3)(iii)** of this Section, and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

(5) **§ 60.759** - The permittee shall comply with all applicable requirements listed in **A.4.d.(6)(i) through (iii)** of this Section.

g. National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (40 CFR Part 63 Subpart AAAA)

(1) **§ 63.1960, § 63.1965, § 63.1975, § 63.1980** - The permittee shall comply with all applicable requirements listed in **A.4.e.(1) through (4)** of this Section.

6. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*
Shielded Requirements

a. No Shielded Requirements are specified.

**************End of Specific Operating Conditions***************

Issued to: Refuse Inc., as Permittee

Section VII. Emission Caps

A. N/A

**************End of Emission Caps***************

Issued to: Refuse Inc., as Permittee

Section VIII. Surface Area Disturbance Conditions

A. Dust Control Plan

a. Permittee will control fugitive dust in accordance with the dust control plan entitled "Surface Area Disturbance Permit - Fugitive Dust Control Plan", as received on **September 11, 2007**.

**************End of Surface Area Disturbance Conditions***************

Issued to: Refuse Inc., as Permittee

Section IX. Schedules of Compliance

A. No Schedules of Compliance is specified.

**************End of Schedules of Compliance****************

Issued to: Refuse Inc., as Permittee

Section X. Amendments

May 12, 2011

(1) Revise UTM coordinates for System 01 to specify NAD 83, rather than NAD 27
(2) Revise System 02, S2.001 – 750 HP Diesel Engine, revise permit to add applicable NESHAP 40 CFR Part 63, Subpart ZZZZ requirements. Revise UTM coordinates to reflect NAD 83, rather than NAD 27.
(3) Revise System 03, S2.002 – 519 HP Diesel Engine, revise permit to add applicable NESHAP 40 CFR Part 63, Subpart ZZZZ requirements. Revise UTM coordinates to reflect NAD 83, rather than NAD 27.
(4) Revise System 05, S2.003 – S2.005 – Three 130 HP Diesel Engines, revise permit to add applicable NESHAP 40 CFR Part 63, Subpart ZZZZ requirements. Revise UTM coordinates to reflect NAD 83, rather than NAD 27.
(5) Revise System 06, S2.006 – S2.008 – Three 10.5 HP Diesel Engines, revise permit to add applicable NESHAP 40 CFR Part 63, Subpart ZZZZ requirements. Revise UTM coordinates to reflect NAD 83, rather than NAD 27.
(6) Revise System 07, S2.009 – One 96 HP diesel generator, revise permit to add applicable NESHAP 40 CFR Part 63, Subpart ZZZZ requirements. Revise UTM coordinates to reflect NAD 83, rather than NAD 27.
(7) Revise UTM coordinates for System 08, S2.010, to reflect NAD 83, rather than NAD 27.
(8) Add System 09, S2.011 – S2.013, to include three new 2,233 HP diesel engines to the permit, combusting landfill gas to generate electricity, including applicable NSPS (40 CFR Part 60, Subpart JJJJ) and NESHAP (40 CFR Part 63, Subpart ZZZZ) requirements.
(9) Add facility-wide emissions cap for CO of 249.0 tons per 12-month rolling period, as specified in Section VII of the operating permit. The emissions cap will enable Refuse, Inc. to qualify as a synthetic minor for PSD.

February XX, 2012

Administrative Revision, Air Case 12AP0242
(1) Removal of System 09, S2.011 – S2.013.
(2) Removal of all provisions in Section VII of the permit relating to a facility-wide CO cap.
(3) Removal of provisions in other sections of the permit that reference a facility-wide CO cap.

Issued to: Refuse Inc., as Permittee

Section X. Amendments (continued)

This permit:

1. **Is non-transferable. (NAC 445B.287) *Part 70 Program***
2. **Will be posted conspicuously at or near the stationary source. (NAC 445B.318) (State Only Requirement)**
3. **Will expire and be subject to renewal five (5) years from December 17, 2007. (NAC 445B.315) *Part 70 Program***
4. **A complete application for renewal of an operating permit must be submitted to the director on the form provided by him with the appropriate fee at least 240 calendar days before the expiration date of this operating permit. [NAC 445B.3443.2 (NAC 445B.323.2)] *Part 70 Program***
5. **Any party aggrieved by the Department's decision to issue this permit may appeal to the State Environmental Commission (SEC) within ten days after the date of notice of the Department's action. (NRS 445B.340) (State Only Requirement)**

THIS PERMIT EXPIRES ON: December 17, 2012

Signature _____

Issued by: Jeffrey Kinder, P.E.
Supervisor, Permitting Branch
Bureau of Air Pollution Control

Phone: (775) 687-9495 Date: DRAFT

CLASS I NON-PERMIT EQUIPMENT LIST

Appended to **Refuse Inc.:** ***Facility ID* #A0018** ***Permit* #AP4953-1148.01**

Emission Unit #(s)	Emission Unit Description(s)	Exemption Regulation(s)	Reason Exemption Applies
IA1.001	Less than 1,000 gallon Diesel Fuel Truck	NAC 445B.288.2.(d)	Storage container less than 40,000 gallons.
IA1.002	10,000 gallon underground Diesel Fuel Tank	NAC 445B.288.2.(d)	Storage container less than 40,000 gallons.
IA1.003	2,000 gallon underground Gasoline Fuel Tank	NAC 445B.288.2.(d)	Storage container less than 40,000 gallons.
IA1.004	1,500 gallon Diesel Fuel Truck	NAC 445B.288.2.(d)	Storage container less than 40,000 gallons.
IA1.005	2,000 gallon underground Waste Oil Tank	NAC 445B.288.2.(d)	Storage container less than 40,000 gallons.
IA1.006	Citrus Solve Cleaner/Degreaser	NAC 445B.288.4.	Cold Parts Cleaners are considered Insignificant Activities as approved by the director on 3/1/96.
IA1.007	Brake Wash Non-Chlorinated	NAC 445B.288.4.	Cold Parts Cleaners are considered Insignificant Activities as approved by the director on 3/1/96.
IA1.008	Petro Amsol 120 (Mineral Spirits)	NAC 445B.288.4.	Cold Parts Cleaners are considered Insignificant Activities as approved by the director on 3/1/96.

***Note*: The equipments listed on this attachment are subject to all applicable requirements of the NAC and ASIP.**